



Northeastern University

# **Undergraduate Catalog 2020-2021**

*Full-Time Day Programs*

# Table of Contents

Undergraduate .....	11	Student Evaluation of Courses (TRACE) .....	39
Admission .....	11	Student Records, Transcripts, and Related Policies .....	39
Admission Policy and Entrance Requirements .....	11	Student Right-to-Know Act .....	41
University Honors Program .....	14	University Academics .....	41
Specialized Entry Programs .....	15	NUpath .....	42
Foundation Year .....	15	Requirements .....	42
Merit Scholarships .....	16	Learning Goals .....	42
Information for Entering Students .....	17	Writing-Intensive Courses .....	45
Student Orientation .....	17	Additional Requirements for BA Students .....	45
Orientation for International Students .....	17	University-Wide Requirements .....	46
Information for International Students .....	18	Living and Learning Communities .....	46
Parent/Family Programs .....	18	Experiential Learning .....	46
Residential Life .....	19	Cooperative Education .....	46
Health Requirements—University Health and Counseling Services (UHCS) .....	19	Research and Creative Activity .....	47
Accommodations for Students with Disabilities .....	19	Service-Learning .....	47
We Care .....	19	Global Experience .....	47
Information Technology Services .....	19	World Languages Center .....	49
Public Safety .....	20	University Honors Program .....	49
College Expenses .....	21	Explore Program .....	49
Financial Aid .....	21	Premedical and Other Preprofessional Health Career Preparation .....	50
Bill Payment .....	22	Prelaw Preparation .....	50
Financing Options .....	23	Education .....	51
Tuition, Room, Board, and Fees Per Semester .....	23	Army, Air Force, and Navy Reserve Officers' Training Corps (ROTC) Programs .....	51
Academic Policies and Procedures .....	26	General Studies Program .....	52
Academic Honors .....	26	About Sample Curricula .....	52
Academic Integrity Policy .....	27	Undergraduate Degrees .....	52
Academic Progression Standards .....	27	Undergraduate Internships .....	53
Accommodations for Students with Disabilities .....	28	College of Arts, Media and Design .....	53
Attendance Requirements .....	28	School of Architecture .....	53
Course Credit Guidelines .....	29	Architecture, BS .....	54
Degrees, Majors, and Minors .....	29	Architectural Studies, BS .....	56
Family Educational Rights and Privacy Act (FERPA) .....	31	Landscape Architecture, BLA .....	58
Final Examinations and Related Policies on Other Exams and Final Term Papers/Projects .....	32	Architectural Studies and Design, BS .....	59
Graduation Requirements .....	32	Architecture and English, BS .....	61
Leaves of Absence and University Withdrawal .....	33	Architecture and Graphic and Information Design, BS .....	63
Personal Information .....	34	Civil Engineering and Architectural Studies, BSCE .....	64
Registration and Taking Courses .....	34	Environmental Engineering and Landscape Architecture, BSEnVE .....	68
Student Bill of Academic Rights and Responsibilities .....	37		

Environmental Science and Landscape Architecture, BS .....	71	Video Arts, Minor .....	132
Architectural and Urban History, Minor .....	73	Communication Studies .....	133
Architectural Science and Systems, Minor .....	73	Communication Studies, BA .....	134
Urban Landscape Studies, Minor .....	73	Communication and Media Studies, BA .....	135
Art + Design .....	74	Communication Studies and Graphic and Information Design, BA .....	103
Art, BA .....	76	Communication Studies and Media and Screen Studies, BA .....	139
Design, BFA .....	79	Communication Studies and Sociology, BA .....	141
Game Design, BFA .....	82	Communication Studies and Theatre, BA .....	143
Media Arts, BFA .....	83	English and Communication Studies, BA .....	145
Studio Art, BFA .....	88	Human Services and Communication Studies, BA .....	147
Architecture and Graphic and Information Design, BS .....	63	Linguistics and Communication Studies, BA .....	149
Behavioral Neuroscience and Design, BS .....	91	Media Arts and Communication Studies, BA .....	118
Business Administration and Design, BS .....	94	Media and Screen Studies, BA .....	153
Computer Science and Design, BS .....	96	Media and Screen Studies and English, BA .....	154
Computer Science and Game Development, BS .....	99	Media and Screen Studies and History, BA .....	157
Computer Science and Media Arts, BS .....	100	Media and Screen Studies and Journalism, BA .....	158
Communication Studies and Graphic and Information Design, BA .....	103	Media and Screen Studies and Media Arts, BA .....	117
English and Graphic and Information Design, BA .....	105	Media and Screen Studies and Philosophy, BA .....	161
Game Art and Animation, BFA .....	108	Media and Screen Studies and Political Science, BA .....	163
Architectural Studies and Design, BS .....	59	Media and Screen Studies and Sociology, BA .....	166
Game Design and Music with Concentration in Music Technology, BS .....	112	Media and Screen Studies and Theatre, BA .....	167
Graphic and Information Design and Mathematics, BS .....	113	Political Science and Communication Studies, BA .....	169
Journalism and Interaction Design, BS .....	114	Business Administration and Communication Studies, BS .....	172
Media and Screen Studies and Media Arts, BA .....	117	Computer Science and Communication Studies, BS .....	174
Media Arts and Communication Studies, BA .....	118	Communication Studies and Speech-Language Pathology and Audiology, BS .....	176
Theatre and Interaction Design, BA .....	120	Health Science and Communication Studies, BS .....	177
Theatre and Interaction Design, BS .....	121	Media and Screen Studies and Theatre, BS .....	180
Mechanical Engineering and Design, BSME .....	123	Music and Communication Studies with Concentration in Music Industry, BS .....	181
Animation, Minor .....	126	Political Science and Communication Studies, BS .....	184
Art, Minor .....	126	Argumentation and Law, Minor .....	186
Art History, Minor .....	127	Cinema Studies, Minor .....	186
Creative Fabrication, Minor .....	128	Communication Studies, Minor .....	186
Experience Design, Minor .....	128	Digital Communications, Minor .....	187
Game Art, Minor .....	129	Film Production, Minor .....	187
Game Design, Minor .....	129	Human Communication, Minor .....	187
Graphic and Information Design, Minor .....	130	Media Screen Studies, Minor .....	188
Immersive Media, Minor .....	130	Media Production, Minor .....	188
Interaction Design, Minor .....	131	Oratory and Public Speaking, Minor .....	188
Photography, Minor .....	131	Political Communication, Minor .....	189
Photojournalism, Minor .....	132		

Professional Presentation, Minor .....	189	Theatre, BS .....	238
Rhetoric, Minor .....	190	American Sign Language and Theatre, BS .....	241
Social Activism, Minor .....	190	Communication Studies and Theatre, BA .....	143
Sports, Media, Communication, Minor .....	190	Cultural Anthropology and Theatre, BA .....	244
School of Journalism .....	191	English and Theatre, BA .....	245
Journalism, BA .....	191	Media and Screen Studies and Theatre, BA .....	167
Journalism and English, BA .....	193	Media and Screen Studies and Theatre, BS .....	180
Journalism and Political Science, BA .....	195	Theatre and Interaction Design, BA .....	120
Media and Screen Studies and Journalism, BA .....	158	Theatre and Interaction Design, BS .....	121
Computer Science and Journalism, BS .....	199	Theatre, Minor .....	254
Criminal Justice and Journalism, BS .....	201	Global Fashion Studies, Minor .....	255
Data Science and Journalism, BS .....	203	Musical Theatre, Minor .....	234
Journalism and Interaction Design, BS .....	114	Playwriting, Minor .....	256
Journalism Practice, Minor .....	207	Performing Arts Administration, Minor .....	234
Journalism Studies, Minor .....	208	Professional Presentation, Minor .....	189
Photojournalism, Minor .....	132	Theatrical Design, Minor .....	257
Sports, Media, Communication, Minor .....	190	Theatre, Performance, and Social Change, Minor .....	258
Music .....	209	Accelerated Bachelor/Graduate Degree Programs .....	258
Music, BA .....	210	D'Amore-McKim School of Business .....	258
Music with Concentration in Music Industry, BS .....	212	Bachelor of Science in Business Administration, BSBA .....	259
Music with Concentration in Music Technology, BS .....	215	Bachelor of Science in International Business, BSIB .....	261
Computer Science and Music with Concentration in Music Technology, BS .....	218	Combined Majors .....	264
Electrical Engineering and Music with concentration in Music Technology, BSEE .....	220	Business Administration and Communication Studies, BS .....	172
Game Design and Music with Concentration in Music Technology, BS .....	112	Business Administration and Design, BS .....	94
Music and Communication Studies with Concentration in Music Industry, BS .....	181	Business Administration and Psychology, BS .....	268
Physics and Music with Concentration in Music Technology, BS .....	226	Computer Science and Business Administration, BS .....	269
Psychology and Music, BS .....	228	Cybersecurity and Business Administration, BS .....	274
Ethnomusicology, Minor .....	230	Data Science and Business Administration, BS .....	276
Music, Minor .....	231	Economics and Business Administration, BS .....	279
Music Composition, Minor .....	231	Health Science and Business Administration, BS .....	280
Music Industry, Minor .....	232	International Affairs and International Business, BS .....	282
Music Performance, Minor .....	232	Mathematics and Business Administration, BS .....	282
Music Recording, Minor .....	233	Political Science and Business Administration, BS .....	284
Music Technology, Minor .....	233	Concentrations .....	286
Musical Theatre, Minor .....	234	Accounting .....	286
Performing Arts Administration, Minor .....	234	Corporate Innovation and Venture .....	287
Songwriting, Minor .....	235	Entrepreneurial Startups .....	287
Theatre .....	235	Entrepreneurship and Innovation .....	288
Theatre, BA .....	236	Family Business .....	289
		Finance .....	289
		Fintech .....	290
		Global Business and Strategy .....	290



Healthcare Management and Consulting .....	290	Computer Science and Economics, BS .....	341
International Business .....	291	Computer Science and English, BS .....	343
Management .....	291	Computer Science and Environmental Science, BS .....	346
Management Information Systems .....	292	Computer Science and Game Development, BS .....	99
Marketing .....	292	Computer Science and History, BS .....	351
Marketing Analytics .....	293	Computer Science and Journalism, BS .....	199
Social Innovation and Entrepreneurship .....	293	Computer Science and Linguistics, BS .....	356
Supply Chain Management .....	294	Computer Science and Mathematics, BS .....	358
Minors .....	294	Computer Science and Media Arts, BS .....	100
Business Administration .....	294	Computer Science and Music with Concentration in Music Technology, BS .....	218
Business Analytics .....	295	Computer Science and Philosophy, BS .....	366
Consulting .....	295	Computer Science and Physics, BS .....	368
Corporate Innovation and Venture .....	296	Computer Science and Political Science, BS .....	371
Emerging Markets .....	296	Computer Science and Sociology, BS .....	375
Entrepreneurial Startups .....	297	Cybersecurity and Business Administration, BS .....	274
Family Business .....	297	Cybersecurity and Criminal Justice, BS .....	380
Leadership and Human Capital .....	298	Cybersecurity and Economics, BS .....	382
Marketing .....	298	Data Science and Biochemistry, BS .....	384
Marketing Analytics .....	299	Data Science and Biology, BS .....	386
Social Innovation and Entrepreneurship .....	299	Data Science and Behavioral Neuroscience, BS .....	388
Strategy .....	299	Data Science and Business Administration, BS .....	276
Sustainable Business Practices .....	300	Data Science and Ecology and Evolutionary Biology, BS .....	393
Accelerated Bachelor/Graduate Degree Programs .....	300	Data Science and Economics, BS .....	396
Khoury College of Computer Sciences .....	300	Data Science and Environmental Science, BS .....	398
Computer Science .....	301	Data Science and Health Science, BS .....	400
Computer Science, BSCS .....	302	Data Science and Journalism, BS .....	203
Computer Science, BACS .....	305	Data Science and Linguistics, BS .....	404
Computer Science, Minor .....	308	Data Science and Mathematics, BS .....	407
Cybersecurity .....	310	Data Science and Physics, BS .....	409
Cybersecurity, BS .....	310	Data Science and Psychology, BS .....	411
Data Science .....	313	Accelerated Bachelor/Graduate Degree Programs .....	413
Data Science, BS .....	313	College of Engineering .....	413
Data Science, Minor .....	315	First Year Engineering .....	415
Khoury Combined Majors .....	316	Interdisciplinary Minors .....	415
Computer Engineering and Computer Science, BSCompE .....	317	Entrepreneurial Engineering, Minor .....	415
Computer Science and Behavioral Neuroscience, BS .....	320	Design and Innovation in Engineering, Minor .....	416
Computer Science and Biology, BS .....	322	Materials Science and Engineering, Minor .....	416
Computer Science and Business Administration, BS .....	269	Sustainable Energy Systems, Minor .....	417
Computer Science and Cognitive Psychology, BS .....	331	Bioengineering .....	418
Computer Science and Communication Studies, BS .....	174	Bioengineering, BSBioE .....	419
Computer Science and Criminal Justice, BS .....	336	Bioengineering and Biochemistry, BSBioE .....	423
Computer Science and Design, BS .....	96		

Chemical Engineering .....	427	Interdisciplinary .....	501
Chemical Engineering, BSCE .....	428	Exercise Science, Minor .....	501
Chemical Engineering and Biochemistry, BSCE .....	432	Global Health, Minor .....	501
Chemical Engineering and Physics, BSCE .....	435	Health, Humanities, and Society, Minor .....	502
Biochemical Engineering, Minor .....	437	Health Psychology, Minor .....	503
Civil and Environmental Engineering .....	438	Health Research Methods, Minor .....	503
Civil Engineering, BSCE .....	438	Healthcare System Operations, Minor .....	498
Civil Engineering and Architectural Studies, BSCE .....	64	Nutrition, Minor .....	504
Environmental Engineering, BSEnVE .....	447	Data Science and Health Science, BS .....	400
Environmental Engineering and Health Science, BSEnVE .....	450	Health Science and Business Administration, BS .....	280
Environmental Engineering and Landscape Architecture, BSEnVE .....	68	Health Science and Sociology, BS .....	508
Architectural Engineering, Minor .....	456	Applied Psychology .....	510
Civil Engineering, Minor .....	457	Health Psychology, Minor .....	503
Environmental Chemistry, Minor .....	458	Mindfulness Studies, Minor .....	511
Electrical and Computer Engineering .....	458	Communication Sciences and Disorders .....	512
Computer Engineering, BSCompE .....	459	Speech-Language Pathology and Audiology, BS .....	513
Computer Engineering and Physics, BSCompE .....	463	Communication Studies and Speech-Language Pathology and Audiology, BS .....	176
Computer Engineering and Computer Science, BSCompE .....	317	Linguistics and Speech-Language Pathology and Audiology, BS .....	516
Electrical Engineering, BSEE .....	469	Communications Sciences and Disorders, Minor .....	517
Electrical Engineering and Physics, BSEE .....	472	Early Intervention, Minor .....	518
Electrical Engineering and Music with concentration in Music Technology, BSEE .....	220	Speech-Language Pathology and Audiology, Minor .....	518
Electrical and Computer Engineering, BSEE or BSCompE .....	477	Health Sciences .....	518
Biomedical Engineering, Minor .....	480	Health Science, BS .....	519
Computer Engineering, Minor .....	481	Data Science and Health Science, BS .....	400
Computational Data Analytics, Minor .....	481	Health Science and Business Administration, BS .....	280
Electrical Engineering, Minor .....	482	Health Science and Communication Studies, BS .....	177
Robotics, Minor .....	483	Health Science and Sociology, BS .....	508
Mechanical and Industrial Engineering .....	483	Health Science and Psychology, BS .....	530
Industrial Engineering, BSIE .....	484	Environmental Engineering and Health Science, BSEnVE .....	450
Mechanical Engineering, BSME .....	488	Exercise Science, Minor .....	501
Mechanical Engineering and Design, BSME .....	123	Global Health, Minor .....	501
Mechanical Engineering and Physics, BSME .....	495	Health, Humanities, and Society, Minor .....	502
Biomechanical Engineering, Minor .....	498	Health Research Methods, Minor .....	503
Healthcare System Operations, Minor .....	498	Health Science, Minor .....	538
Industrial Engineering, Minor .....	498	Healthcare System Operations, Minor .....	498
Mechanical Engineering, Minor .....	499	Nutrition, Minor .....	504
Robotics, Minor .....	483	Public Health, Minor .....	539
Accelerated Bachelor/Graduate Degree Programs .....	499	School of Nursing .....	540
Bouvé College of Health Sciences .....	500	Nursing, BSN .....	540
		Nursing, BSN—Accelerated Program for Second-Degree Students .....	547

Wellness Studies, Minor .....	550	Linguistics and Speech-Language Pathology and Audiology, BS .....	516
School of Pharmacy .....	551	Linguistics and Communication Studies, BA .....	149
Pharmaceutical Sciences, BS .....	551	Linguistics and English, BA .....	632
Pharmacy Studies, BS .....	554	Linguistics, Minor .....	635
Pharmacy, PharmD .....	556	Marine and Environmental Sciences .....	635
Physical Therapy, Movement, and Rehabilitation Sciences ....	561	Environmental Studies, BA .....	637
Human Movement Science, Minor .....	562	Environmental Studies and History, BA .....	641
Accelerated Bachelor/Graduate Degree Programs .....	562	Environmental Studies and International Affairs, BA .....	642
College of Science .....	562	Environmental Studies and Philosophy, BA .....	646
Behavioral Neuroscience .....	564	Environmental Studies and Political Science, BA .....	647
Behavioral Neuroscience, BS .....	564	Sociology and Environmental Studies, BA .....	651
Behavioral Neuroscience and Design, BS .....	91	Environmental and Sustainability Sciences, BS .....	651
Behavioral Neuroscience and Philosophy, BS .....	569	Environmental Science, BS .....	655
Computer Science and Behavioral Neuroscience, BS .....	320	Environmental Science and Landscape Architecture, BS .....	71
Data Science and Behavioral Neuroscience, BS .....	388	Ecology and Evolutionary Biology, BS .....	661
Behavioral Neuroscience, Minor .....	577	Marine Biology, BS .....	664
Biochemistry .....	577	Computer Science and Environmental Science, BS .....	346
Biochemistry, BS .....	578	Data Science and Environmental Science, BS .....	398
Bioengineering and Biochemistry, BSBioE .....	423	Data Science and Ecology and Evolutionary Biology, BS .....	393
Chemical Engineering and Biochemistry, BSCHE .....	432	Environmental Science and Chemistry, BS .....	613
Data Science and Biochemistry, BS .....	384	Environmental Studies and Economics, BS .....	677
Biochemistry, Minor .....	590	Ecology and Evolutionary Biology, Minor .....	678
Biology .....	591	Environmental Studies, Minor .....	679
Biology, BS .....	592	Environmental and Sustainability Sciences, Minor .....	679
Cell and Molecular Biology, BS .....	595	Geosciences, Minor .....	680
Biology and English, BS .....	599	Marine Sciences, Minor .....	680
Biology and Mathematics, BS .....	601	Mathematics .....	680
Biology and Political Science, BS .....	603	Mathematics, BA .....	681
Computer Science and Biology, BS .....	322	Mathematics, BS .....	683
Data Science and Biology, BS .....	386	Biology and Mathematics, BS .....	601
Biology, Minor .....	610	Computer Science and Mathematics, BS .....	358
Chemistry and Chemical Biology .....	611	Data Science and Mathematics, BS .....	407
Chemistry, BS .....	611	Economics and Mathematics, BS .....	690
Environmental Science and Chemistry, BS .....	613	Graphic and Information Design and Mathematics, BS .....	113
Chemistry, Minor .....	615	Mathematics and Business Administration, BS .....	282
Environmental Chemistry, Minor .....	458	Mathematics and Cultural Anthropology, BS .....	695
Linguistics .....	616	Mathematics and Physics, BS .....	696
Linguistics, BS .....	617	Mathematics and Political Science, BS .....	697
American Sign Language and Linguistics, BS .....	618	Mathematics and Psychology, BS .....	699
Computer Science and Linguistics, BS .....	356	Mathematics and Sociology, BS .....	700
Data Science and Linguistics, BS .....	404		
Linguistics and Cultural Anthropology, BS .....	624		
Linguistics and Psychology, BS .....	626		

Mathematics, Minor .....	702	Law and Public Policy, Minor .....	763
Physics .....	702	Urban Studies, Minor .....	765
Physics, BS .....	703	Women's, Gender, and Sexuality Studies, Minor .....	765
Applied Physics, BS .....	705	Asian Studies .....	767
Biomedical Physics, BS .....	706	Asian Studies, BA .....	767
Mathematics and Physics, BS .....	696	History and Asian Studies, BA .....	768
Computer Science and Physics, BS .....	368	East Asian Studies, Minor .....	769
Data Science and Physics, BS .....	409	School of Criminology and Criminal Justice .....	770
Physics and Music with Concentration in Music Technology, BS .....	226	English and Criminal Justice, BA .....	771
Physics and Philosophy, BS .....	717	History and Criminal Justice, BA .....	773
Chemical Engineering and Physics, BSCHE .....	435	International Affairs and Criminal Justice, BA .....	775
Computer Engineering and Physics, BSCompE .....	463	Criminal Justice, BS .....	779
Electrical Engineering and Physics, BSEE .....	472	Computer Science and Criminal Justice, BS .....	336
Mechanical Engineering and Physics, BSME .....	495	Criminal Justice and Journalism, BS .....	201
Physics, Minor .....	730	Criminal Justice and Philosophy, BS .....	786
Psychology .....	730	Criminal Justice and Political Science, BS .....	787
Psychology, BS .....	730	Criminal Justice and Psychology, BS .....	741
American Sign Language and Psychology, BS .....	735	Criminal Justice and Sociology, BS .....	791
Business Administration and Psychology, BS .....	268	Cybersecurity and Criminal Justice, BS .....	380
Computer Science and Cognitive Psychology, BS .....	331	Human Services and Criminal Justice, BS .....	795
Criminal Justice and Psychology, BS .....	741	Criminal Justice, Minor .....	797
Data Science and Psychology, BS .....	411	Cultures, Societies, and Global Studies .....	797
Economics and Psychology, BS .....	744	Africana Studies, BA .....	798
Health Science and Psychology, BS .....	530	Religious Studies and Africana Studies, BA .....	801
Linguistics and Psychology, BS .....	626	Spanish, BA .....	803
Mathematics and Psychology, BS .....	699	Spanish and International Affairs, BA .....	804
Psychology and Music, BS .....	228	Africana Studies, BS .....	808
Psychology, Minor .....	754	American Sign Language, BS .....	810
Interdisciplinary .....	755	American Sign Language and Human Services, BS .....	811
Environmental Chemistry, Minor .....	458	American Sign Language and Linguistics, BS .....	618
Scientific Commercialization, Minor .....	755	American Sign Language and Psychology, BS .....	735
Accelerated Bachelor/Graduate Degree Programs .....	756	American Sign Language and Theatre, BS .....	241
College of Social Sciences and Humanities .....	756	African Studies, Minor .....	817
Interdisciplinary .....	757	Africana Studies, Minor .....	817
History, Culture, and Law, BA .....	757	American Sign Language, Minor .....	817
Politics, Philosophy, and Economics, BS .....	757	Arabic, Minor .....	818
Computational Social Science, Minor .....	760	Black Feminist Studies, Minor .....	818
Digital Methods in the Humanities, Minor .....	761	Chinese, Minor .....	819
Health, Humanities, and Society, Minor .....	502	Film and International Cultures, Minor .....	819
Food Systems Sustainability, Health, and Equity, Minor .....	762	German, Minor .....	820
Latino/a, Latin American, and Caribbean Studies, Minor .....	763	Italian, Minor .....	820
		Japanese, Minor .....	821
		French, Minor .....	821

Portuguese, Minor .....	822	History and Asian Studies, BA .....	768
Russian, Minor .....	822	History and Criminal Justice, BA .....	773
Spanish, Minor .....	823	History and Cultural Anthropology, BA .....	901
Economics .....	823	History and Economics, BA .....	826
Economics, BA .....	824	History and English, BA .....	879
History and Economics, BA .....	826	History and Philosophy, BA .....	907
International Affairs and Economics, BA .....	827	History and Political Science, BA .....	908
Political Science and Economics, BA .....	831	History and Religious Studies, BA .....	911
Economics, BS .....	833	International Affairs and History, BA .....	913
Computer Science and Economics, BS .....	341	Media and Screen Studies and History, BA .....	157
Cybersecurity and Economics, BS .....	382	History, BS .....	918
Data Science and Economics, BS .....	838	Computer Science and History, BS .....	351
Economics and Business Administration, BS .....	279	History and Economics, BS .....	846
Economics and Mathematics, BS .....	690	History, Minor .....	925
Economics and Philosophy, BS .....	841	Human Services .....	925
Economics and Psychology, BS .....	744	Human Services, BA .....	925
Environmental Studies and Economics, BS .....	677	Human Services and International Affairs, BA .....	927
History and Economics, BS .....	846	Political Science and Human Services, BA .....	931
Political Science and Economics, BS .....	847	Human Services and Sociology, BA .....	934
Politics, Philosophy, and Economics, BS .....	757	Human Services, BS .....	935
Economics, Minor .....	853	American Sign Language and Human Services, BS .....	811
English .....	854	Human Services and Communication Studies, BA .....	147
English, BA .....	854	Human Services and Criminal Justice, BS .....	795
Computer Science and English, BS .....	343	Political Science and Human Services, BS .....	942
English and Communication Studies, BA .....	145	Human Services and Sociology, BS .....	944
English and Criminal Justice, BA .....	771	Human Services, Minor .....	946
English and Cultural Anthropology, BA .....	866	International Affairs .....	947
English and Graphic and Information Design, BA .....	105	International Affairs, BA .....	947
English and Philosophy, BA .....	870	International Affairs with African Studies Concentration, BA .....	951
English and Political Science, BA .....	873	International Affairs with Asian Studies Concentration, BA .....	953
English and Theatre, BA .....	245	International Affairs with European Studies Concentration, BA .....	956
History and English, BA .....	879	International Affairs with Latin American Studies Concentration, BA .....	958
Journalism and English, BA .....	193	International Affairs with Middle East Studies Concentration, BA .....	960
Linguistics and English, BA .....	632	Environmental Studies and International Affairs, BA .....	642
Media and Screen Studies and English, BA .....	154	Human Services and International Affairs, BA .....	927
Architecture and English, BS .....	61	International Affairs and Criminal Justice, BA .....	775
Biology and English, BS .....	599	International Affairs and Cultural Anthropology, BA .....	974
English, Minor .....	893	International Affairs and Economics, BA .....	827
Rhetoric, Minor .....	190	International Affairs and History, BA .....	913
Writing, Minor .....	893		
History .....	894		
History, BA .....	895		
Environmental Studies and History, BA .....	641		

International Affairs and International Business, BS .....	282	Political Science and Human Services, BA .....	931
International Affairs and Religious Studies, BA .....	985	Political Science and International Affairs, BA .....	990
Political Science and International Affairs, BA .....	990	Political Science and Philosophy, BA .....	1036
Sociology and International Affairs, BA .....	995	Sociology and Political Science, BA .....	1100
Spanish and International Affairs, BA .....	804	Political Science, BS .....	1102
International Affairs, Minor .....	1003	Biology and Political Science, BS .....	603
Middle East and Mediterranean Studies, Minor .....	1005	Computer Science and Political Science, BS .....	371
Jewish Studies .....	1006	Criminal Justice and Political Science, BS .....	787
Jewish Studies and Religion, BA .....	1006	Mathematics and Political Science, BS .....	697
Jewish Studies, Minor .....	1009	Political Science and Business Administration, BS .....	284
Philosophy and Religion .....	1009	Political Science and Communication Studies, BS .....	184
Philosophy, BA .....	1010	Political Science and Economics, BS .....	847
Religious Studies, BA .....	1017	Political Science and Human Services, BS .....	942
English and Philosophy, BA .....	870	Political Science and Philosophy, BS .....	1057
Environmental Studies and Philosophy, BA .....	646	Political Science, Minor .....	1128
History and Philosophy, BA .....	907	American Political Institutions, Minor .....	1129
History and Religious Studies, BA .....	911	International Security Studies, Minor .....	1129
International Affairs and Religious Studies, BA .....	985	Sociology and Anthropology .....	1129
Jewish Studies and Religion, BA .....	1006	Sociology, BA .....	1130
Media and Screen Studies and Philosophy, BA .....	161	Cultural Anthropology, BA .....	1132
Political Science and Philosophy, BA .....	1036	Sociology and Cultural Anthropology, BA .....	1134
Religious Studies and Africana Studies, BA .....	801	Communication Studies and Sociology, BA .....	141
Philosophy, BS .....	1040	Cultural Anthropology and Theatre, BA .....	244
Behavioral Neuroscience and Philosophy, BS .....	569	English and Cultural Anthropology, BA .....	866
Computer Science and Philosophy, BS .....	366	History and Cultural Anthropology, BA .....	901
Criminal Justice and Philosophy, BS .....	786	Human Services and Sociology, BA .....	934
Economics and Philosophy, BS .....	841	International Affairs and Cultural Anthropology, BA .....	974
Physics and Philosophy, BS .....	717	Media and Screen Studies and Sociology, BA .....	166
Political Science and Philosophy, BS .....	1057	Sociology and Environmental Studies, BA .....	651
Politics, Philosophy, and Economics, BS .....	757	Sociology and International Affairs, BA .....	995
Information Ethics, Minor .....	1062	Sociology and Political Science, BA .....	1100
Philosophy, Minor .....	1063	Sociology, BS .....	1155
Religious Studies, Minor .....	1063	Cultural Anthropology, BS .....	1157
Ethics, Minor .....	1064	Computer Science and Sociology, BS .....	375
Political Science .....	1065	Criminal Justice and Sociology, BS .....	791
Political Science, BA .....	1065	Health Science and Sociology, BS .....	508
English and Political Science, BA .....	873	Human Services and Sociology, BS .....	944
Environmental Studies and Political Science, BA .....	647	Linguistics and Cultural Anthropology, BS .....	624
History and Political Science, BA .....	908	Mathematics and Cultural Anthropology, BS .....	695
Journalism and Political Science, BA .....	195	Mathematics and Sociology, BS .....	700
Political Science and Communication Studies, BA .....	169	Sociology and Cultural Anthropology, BS .....	1171
Media and Screen Studies and Political Science, BA .....	163	Cultural Anthropology, Minor .....	1171
Political Science and Economics, BA .....	831	Science and Technology Studies, Minor .....	1172

Sociology, Minor .....	1172
Accelerated Bachelor/Graduate Degree Programs .....	1172
Faculty .....	1173
Appendix .....	1214
University Leadership .....	1214
Governing Boards and Officers of Northeastern .....	1215
Statements of Accreditation and State Authorization .....	1215
Major CIP Codes .....	1217
Resources .....	1234
General Information .....	1234
Index .....	1236



# Undergraduate

## Full-Time Day Programs

Lauren Scornavacca / Northeastern University

### Admission

- Admission Policy and Entrance Requirements (p. 11)
- University Honors Program (p. 14)
- Specialized Entry Programs (p. 15)
- Merit Scholarships (p. 16)

### Admission Policy and Entrance Requirements

Admission to Northeastern is highly selective. Applicants are admitted either as first-year or transfer students. Candidates who bring diverse experiences, perspectives, and interests to our community are identified by the Admissions Committee following a holistic application evaluation. Approximately 2,800 first-year students and an additional cohort of transfer students enroll each September; an additional 1,100 new first-year students will enroll in January through The N.U.*in* Program, a first-year global experience that requires enrolling students to begin their college studies by earning transfer credit in the fall semester<sup>1</sup> at one of our international partner institutions and transitioning to our Boston campus in the spring semester. In addition to The N.U.*in* Program, first-year applicants may also be offered direct or conditional admission into other specialized entry programs. Additional information on specialized entry programs is available online (<http://catalog.northeastern.edu/undergraduate/admission/specialized-entry/>), and additional information about The N.U.*in* Program is available here.

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

When considering applicants for first-year admission, the committee considers whether the applicant's high school transcript reflects the various academic opportunities offered such as honors, advanced placement, 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.

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

## Application Programs

Northeastern offers the following application programs.

### Freshman Applicants:

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

### Transfer Applicants\*:

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

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

## Required Materials

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

### FRESHMAN APPLICANTS

More than 64,000 students apply for a space in the freshman class. The committee is responsible for admitting applicants believed to be contributors to Northeastern's diverse and vibrant academic and social community. In particular, the committee is interested in applicants who have challenged themselves academically; are highly motivated; 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, including any Northeastern-specific questions. A complete application includes:
  - An application fee of \$75 (or request for fee waiver through application question).



- The Early Decision Agreement for students applying under the binding Early Decision I or II application options.
- Secondary school counselor and teacher recommendations.
- Secondary school report and transcripts with final junior-year grades. First-semester or first-trimester grades should be submitted when they are available; first-quarter grades are not required.
  - General Equivalency Diploma (GED) recipients should provide their official GED score reports and their most complete high school transcript.
  - Home-schooled applicants should submit an academic portfolio/transcript consistent with their state guidelines. This should include grades for each course. They must also provide proof that they will have met by the end of May of the year of graduation all requirements for an official high school diploma and submit a GED, or a certificate of completion from their local school district or state board of education, by the end of July of the year of matriculation. In addition to all other first-year requirements, home-schooled students must submit Northeastern's home-school supplement, which requires students to detail the rigor of their 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 or must have earned the GED. In addition to the required materials for freshman applicants, early high school graduate applicants must provide statements of support from the school principal or guidance counselor and the student's parents. The endorsements should speak directly to the applicant's academic readiness and emotional maturity for college. Early high school graduates will only be considered at Regular Decision or Early Decision II so first-semester/trimester grades from the current academic year can be considered.
  - Nontraditional grading policies: Students who attend schools where narrative evaluations are used instead of traditional letter grades are required to submit the narratives to complete their applications.
- 2020–21 policy on standardized tests:
  - **In the 2020–21 application cycle, Northeastern will be test optional. SAT or ACT scores are not required for an application to be complete.**
  - Any student may still submit SAT, ACT, or other standardized exam (i.e., AP, IB, A-level) scores for consideration.
  - If an applicant chooses to self-report their scores through the Application Status Check, official scores must be sent to Northeastern upon submitting their enrollment deposit.
  - Students who choose not to submit standardized test scores will not be disadvantaged in the process (note English proficiency requirements).
- English proficiency: As the primary instructional language at Northeastern is English, proficiency in English must be demonstrated in order to qualify for admission. Non-native English-speaking applicants, who were not educated entirely in English throughout the four consecutive academic years immediately prior to enrolling at Northeastern will be required to submit valid and official results from an approved English Language Test. Please see the International Applicants (<https://www.northeastern.edu/admissions/application-information/international-student-admissions/>) page on the Undergraduate Admissions website for the most up-to-date information.
- International students are required to submit Northeastern's Declaration and Certification of Finances (DCF), which can be accessed and submitted through the Application Status Check.
- Portfolios are required for studio art and are highly encouraged for majors within the College of Arts, Media and Design. Northeastern uses SlideRoom for online portfolio submissions. See additional information (<http://catalog.northeastern.edu/undergraduate/admission/admission-policy-entrance-requirements/#adm-camd>).

### TRANSFER APPLICANTS

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

#### Transfer applicants must submit the following:

- 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 adviser, professor, or employer.
- Final high school transcript or GED.
- Joint Service Transcript (if you are a veteran).
- 2020–21 policy on standardized tests:
  - **In the 2020–21 application cycle, Northeastern will be test optional. SAT or ACT scores are not required for an application to be complete.**
  - Any student may still submit SAT, ACT, or other standardized exam (i.e., AP, IB, A-level) scores for consideration. Note, standardized test scores have never been a requirement for students who have over 24 credits completed after high school graduation at the time of applying, have been out of high school for more than five years, or have completed high school outside of the United States.
  - If an applicant chooses to self-report their scores through the Application Status Check, official scores must be sent to Northeastern upon submitting their enrollment deposit.
  - Students who choose not to submit standardized test scores will not be disadvantaged in the process (note English proficiency requirements)
- English proficiency: As the primary instructional language at Northeastern is English, proficiency in English must be demonstrated in order to qualify for admission. Non-native English-speaking applicants, who were not educated entirely in English throughout the four consecutive academic years immediately prior to enrolling at Northeastern will be required to submit valid and official results from an approved English Language Test. Please see the International Applicants (<https://www.northeastern.edu/admissions/application-information/international-student-admissions/>) page on the Undergraduate Admissions website for the most up-to-date information.
- International students are required to submit Northeastern's Declaration and Certification of Finances (DCF), which can be accessed and submitted through the Application Status Check.
- Portfolios are required for studio art and are highly encouraged for majors within the College of Arts, Media and Design. Northeastern

uses SlideRoom (<http://www.northeastern.edu/admissions/application-information/>) for online portfolio submissions. See additional information (p. ).

## Transfer Credit

Students may transfer up to 60 semester hours of credit from a two-year college, or up to 80 semester hours from a four-year college, or a combination of the two types of colleges. If you have been admitted to the D'Amore-McKim School of Business and your college or university is not AACSB-accredited, the maximum number of credits that you can transfer to Northeastern is 60. See also "Residency Requirement (p. 33)."

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

All transfer-credit documents should be received prior to matriculation and *must* be received within one semester of matriculation. These documents include, but are not limited to, Advanced Placement, International Baccalaureate, and International Matriculation 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 coursework completed at an international institution must be translated into English and evaluated by a recognized credential agency.

### ADVANCED STANDING FOR FRESHMEN

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

Northeastern currently awards advanced credit for the following examinations:

- Advanced Placement (AP)
- International Baccalaureate (IB)
- Advanced Levels (A-Levels)
- Abitur (Germany)
- Baccalauréat (France)
- Cambridge Pre-University (Pre-U)
- Caribbean Advanced Proficiency Examinations (CAPE)
- Maturität/Maturité (Switzerland)

### Advanced Placement (AP) Examinations

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

### International Baccalaureate (IB) Examinations

- Credit is generally awarded for scores of 5, 6, or 7 on Higher Level (HL) exams.
- No credit is awarded for Standard Level (SL) exams, the Extended Essay (EE), or Theory of Knowledge (TOK).

- Visit the Transfer Equivalency Database (<https://ugadmissions.northeastern.edu/transfercredit/TransferCreditevaluatedstudent2.asp>) for an up-to-date listing.

### Advanced Level (A-Level) Examinations

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

### International Matriculation Examinations

- Abitur (Allgemeinen Hochschulreife): Credit is generally awarded for scores 7 (out of 15) and higher on written (schriftlich) final exams (Abiturprüfung). No credit is awarded for oral (mündlich) exams.
- Baccalauréat (Baccalauréat Général, Diplôme de Bachelier de l'Enseignement du Second Degré, or Option Internationale du Baccalauréat): Credit is generally awarded for scores 10 or higher (out of 20) on final written exams in subjects studied with coefficients 4 or higher. No credit is awarded for oral exams.
- Cambridge Pre-University (Pre-U): Credit is generally awarded for scores M3 or higher on Principal Subjects. No credit is awarded for Short Courses or Global Perspectives and Research.
- Caribbean Advanced Proficiency Examinations (CAPE): Credit is generally awarded for grades 3 or below (out of 7, with 1 being the highest) on two-unit subjects. No credit is awarded for one-unit courses.
- Maturität/Maturité: Credit is generally awarded for scores 4 or higher (out of 6) on the main subject (Schwerpunktfach) or complementary subject (Ergänzungsfach) on either the Swiss Federal Maturity Certificate or federally recognized cantonal maturity certificates.

### Additional Information for International Applicants

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

- Once an enrollment deposit is submitted, all international students will be able to access myOGS, Northeastern's online international student portal. (International students can access myOGS through their myNortheastern portal.)
- International students must submit the appropriate request form in myOGS for either the Form I-20 or Form DS-2019.
- Once the student submits the request form and all required supporting documents, the OGS team will review the request and generate the I-20 within 10 business days.

- Once students receive the I-20 or DS-2019, students can apply for the F-1 or J-1 visa at a nearby overseas U.S. embassy or consulate.
- If the visa is granted, students are permitted to enter the United States no more than 30 days before the start date of their academic program (which will be provided on the I-20 or DS-2019).

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

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

### Non-Native English-Speaking Applicants

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

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

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

We encourage students to select a major that reflects their current academic interests and aspirations; however, the Explore Program for undeclared students provides opportunities to explore our various disciplines and programs. Northeastern offers advisory programs for

students interested in preprofessional programs, including medical, dental, law, and veterinary graduate school. 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. Hard-copy portfolios will not be accepted and cannot be reviewed.

#### *Studio Art*

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

#### *Music Composition and Technology*

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

#### *Music Performance*

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

## University Honors Program

The University Honors Program values integrated, student-directed, and experiential learning that is personalized to meet students' individual goals and interests. Our community of intellectually engaged students, faculty, and advisers are committed to engagement in scholarship that will enable students to solve critical societal issues and make a difference at home and in the world. Students benefit from unique and enriched educational options that include stimulating courses and opportunities for research and creative endeavors, global experiences, service-learning, mentoring, and the development of competencies that will position students for lifelong learning and personal and professional success. 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, second, or third semesters who wish to be considered for entry may consult the University Honors Program's website (<http://www.northeastern.edu/honors/>) for application instructions.

## Specialized Entry Programs

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

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

Northeastern enrolls selected new students in the spring semester through The N.U.*in* Program. During the fall semester N.U.*in* participants 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. For the most up-to-date information regarding The N.U.*in* Program, please refer to the program website.

### 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. 52).

### 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.

Visit the Foundation Year page of this catalog (p. 15) for additional information.

### 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.

### NU *Bound*

NU *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. Please note, NU *Bound* provides a conditional offer of admission to Northeastern upon successful completion of the program.

### NU Immerse

NU 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 enroll in the College of Professional Studies during the first year. Students will improve language and academic skills through a specially designed two-semester curriculum. NU Immerse offers conditional admission to undergraduate degree programs upon successful completion of the program.

## Foundation Year

### Overview

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

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

Upon graduation, students are eligible to:

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

### Application

To be considered for Foundation Year, students must be:

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

### PROCESS

1. Submit an application to Northeastern (<https://www.northeastern.edu/admissions/application-information/apply/>) using the Common Application or the Coalition Application.
2. Submit required materials (<https://www.northeastern.edu/admissions/application-information/apply/>).



3. Complete the Free Application for Federal Student Aid (FAFSA (<http://www.fafsa.ed.gov/>)) online.

### CONTACT INFORMATION

Fax: 617.373.8574

foundationyear@northeastern.edu

### Program Requirements

Designed with the student in mind, Foundation Year's intensive curriculum includes courses in English, sociology, mathematics, and history. Students can also focus their studies by choosing from electives in a business, science, or liberal arts track. Foundation Year students can earn 30–32 semester hours of credit—equivalent to one year of college credits.

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

Complete all courses below unless otherwise indicated.

### CORE COURSES

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

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

### ELECTIVES

Code	Title	Hours
<b>Liberal Arts Course Track</b>		
HST 2425	Coming to America: The American Immigrant Experience	3
PHL 1100	Social and Political Philosophy	3
POL 1300	American Government	3
PSY 1100	Foundations of Psychology	3
SOC 2240	Death and Dying	3
<b>Science Course Track</b>		
BIO 1100	Principles of Biology 1	3
BIO 1101	Lab for BIO 1100	1
CHM 1100	General Chemistry 1	3
CHM 1101	Lab for CHM 1100	1
CHM 1200	General Chemistry 2	3
CHM 1201	Lab for CHM 1200	1
<b>Business Course Track</b>		
ECN 1100	Principles of Microeconomics	3
ECN 1200	Principles of Macroeconomics	3

MGT 2100	Principles of Management	3
MGT 2330	Business Law	3

### Merit Scholarships

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

### National Merit Finalist and National Hispanic Scholar Scholarships

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

**Eligibility:** Admitted freshman applicants who are National Hispanic Recognition Program Scholars or have been designated National Merit Finalists by the National Merit Scholarship Corporation.

### Merit Scholarships

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

### Northeastern Honors Program

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

U.S. citizen or a permanent resident enrolling directly from a two-year institution of higher education.

### Ujima Global Leaders Program

The Ujima Global Leaders Program is a scholarship program focused on developing leaders for tomorrow's diverse and complex world. Ujima Global Leaders from all academic disciplines will work collaboratively to develop intercultural competence and awareness by engaging with communities on campus, throughout Boston and the world. Working with staff and faculty, Ujima Global Leaders may choose to make an impact based on their interests and goals via community service involvement, experiential opportunities, and research and global experiences. Committed to excellence, academic achievement, service, and diversity, Ujima Global Leaders will be prepared to meet the challenges of tomorrow. The Ujima Global Leaders Program seeks to enroll academically talented first-year students with demonstrated leadership skills, community involvement, and/or an interest in issues related to serving underrepresented and underserved populations. Recipients receive a scholarship called the Ujima Global Leadership Award, and those with demonstrated financial need will have their full need met. Ujima Global Leaders are expected to participate in 50 hours of community service each year.

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

### Information for Entering Students

- Student Orientation (p. 17)
- Orientation for International Students (p. 17)
- Information for International Students (p. 18)
- Parent/Family Programs (p. 18)
- Residential Life (p. 19)
- Health Requirements—University Health and Counseling Services (UHCS) (p. 19)
- Accommodations for Students with Disabilities (p. 19)
- We Care (p. 19)
- Information Technology Services (p. 19)
- Public Safety (p. 20)

### 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 Family Programs.

Students entering in the fall will attend sessions during the months of June and July. Students entering 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 Admissions Application Status Check (<https://www.northeastern.edu/admissions/application-information/application-status-check/>).

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 **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** are required to attend the student orientation session immediately preceding the start of the academic semester. The Office of Global Services (OGS) (<https://www.northeastern.edu/ogs/>) will host a specialized presentation that will be incorporated into the 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 Family Programs  
101 Ell Hall  
Northeastern University  
360 Huntington Avenue  
Boston, MA 02115

Website: [northeastern.edu/orientation](http://www.northeastern.edu/orientation/) (<http://www.northeastern.edu/orientation/>)  
Phone: 800.696.6516  
Email: [orientation@northeastern.edu](mailto:orientation@northeastern.edu)

### Orientation for International Students

#### International Student Orientation and Programming:

The Office of Global Services (OGS) (<https://international.northeastern.edu/ogs/>) organizes a mandatory orientation for international students on an F-1 or J-1 visa. Students will receive an overview of non-immigrant visa compliance requirements along with information and resources to support academic success, student life, campus safety, and cultural adjustment.

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

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

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

For further details on the mandatory International Student Orientation, mandatory Immigration Clearance process, OGS academic services and cultural events, 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

## Information for International Students

### Office of Global Services

Website (<http://www.northeastern.edu/ogs/>)  
405 Ell Hall  
617.373.2310  
617.373.8788 (fax)

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

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

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

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

International students must maintain full-time status at Northeastern to be in compliance with immigration and SEVIS regulations. Also, they must not engage in any type of employment unless authorized by OGS. Note that timely registration for courses is especially important so that they may remain in compliance with current federal regulations. They should consult with OGS if they have questions about their individual status.

### Coming to Northeastern

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

- **Obtain F-1 or J-1 visa** from the U.S. embassy or consulate in the home country to be eligible to study in the United States. An international student may attend Northeastern in a nonimmigrant status other than F-1 or J-1 only if U.S. immigration regulations allow for study in the United States under that specific nonimmigrant visa classification. Some international students must apply and be approved for a change of status (e.g., from B-2 to F-1) before beginning the program at Northeastern. For detailed information/instructions specific to a student's current nonimmigrant status,

eligibility to participate in co-op or other forms of experiential learning, contact OGS (<http://www.northeastern.edu/ogs/>).

- **Acquire Student Health Insurance:** Since September 1989, Massachusetts law (M.G.L. c.15A, § 18) has required every full-time and part-time student enrolled in a certificate, diploma, or degree-granting program in a Massachusetts institution of higher learning to participate in a Student Health Insurance Program (SHIP) or in a health benefit plan with comparable coverage. The Student Health Program defines a part-time student as a student enrolled in at least 75 percent of the full-time curriculum. (College of Professional Studies graduate students—7 credits, part-time graduate students—6 credits).
- **Complete health report:** Prior to entering Northeastern, all enrolled students must complete and submit a health report to University Health and Counseling Services (UHCS). It must be completed and returned by the stated deadline. The required record of immunity section is necessary for compliance with the Massachusetts immunization requirements for college-age students. Failure to meet the requirement will prevent future course registration. Additionally, further documentation of immunity is mandatory for students in Bouvé College of Health Sciences. Visit the UHCS webpage (<http://www.northeastern.edu/uahcs/>) to access the health report online.

### Planning Information

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

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

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

### SEVIS Compliance

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

OGS advises students on the complexities of immigration compliance and interfaces with various U.S. government agencies. OGS maintains and updates the SEVIS system and advises students on relevant issues related to nonimmigrant student status by individual appointments or through workshops and information sessions. Contact OGS with questions relating to nonimmigrant student status or any aspect of SEVIS compliance.

### Parent/Family Programs

The Office of Student Orientation and 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 its annual signature program, Family & Friends Weekend, and provides timely communications on important campus news and

events through their website (<http://northeastern.edu/parents/>), Family Matters newsletter, Facebook page, Tuesday Talks webinars, Family Message Board, and Family Portal.

Parents and guardians of students can create an online Family Portal account by visiting the myNortheastern 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 Family Programs  
101 Ell Hall  
Northeastern University  
360 Huntington Avenue  
Boston, MA 02115

Website: [northeastern.edu/parents](http://northeastern.edu/parents/) (<http://northeastern.edu/parents/>)  
Phone: 800.696.6516  
Email: [parents@northeastern.edu](mailto:parents@northeastern.edu)

## Residential Life

The Department of Residential Life strives to create a safe and inclusive residential community that develops and supports opportunities for intellectual and social development and prepares students to become purposeful contributors to our global society. We also provide resources that support our students in accomplishing their academic and personal goals. Residential Life staff are trained in facilities management, community engagement, crisis management, and conflict resolution, as well as interpersonal communications, in order to assist our students to achieve their aspirations.

Each residence hall is supervised by a professional building staff member and student resident assistants who work together to maintain close contact with students to help make their experience living 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, achievement-oriented environment with opportunities for relationship building around common interests as well as continued learning outside the classroom.

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

Prior to entering Northeastern, all enrolled students must complete and submit a University Health Report (<https://www.northeastern.edu/uhcs/forms/university-health-report/>) to University Health and Counseling Services (UHCS). It must be completed and returned by the stated deadline. The required record of immunity section is necessary for compliance with the Massachusetts School Immunization Requirements for Post-Secondary Institutions. Failure to meet the requirement will prevent future course registration. Additionally, further documentation of immunity is mandatory for students in Bouvé College of Health Sciences. For more information, health sciences students should check with your program adviser or placement supervisor.

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

## Accommodations for Students with Disabilities

20 Dodge Hall

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

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

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

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

## We Care

226 Curry Student Center  
617.373.7591  
[wecare@northeastern.edu](mailto:wecare@northeastern.edu) ([we\\_care@northeastern.edu](mailto:wecare@northeastern.edu))

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

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

## Information Technology Services

617.373.HELP (4357)  
[help@northeastern.edu](mailto:help@northeastern.edu)  
[ITS Website \(https://its.northeastern.edu\)](https://its.northeastern.edu)  
[Tech Service Portal \(https://service.northeastern.edu/tech/\)](https://service.northeastern.edu/tech/)

IT Services (ITS) is Northeastern's centralized technology resource for students, faculty, and staff.

Visit the Connect To Tech guide (<https://connect-to-tech.northeastern.edu/cat2021/>) for key student tech resources and information that incoming students should know, such as myNortheastern accounts and access, laptop recommendations and



discounts, and sites and mobile apps that keep students connected to the university and the community.

Some of the services and solutions that ITS provides include:

- Secure, high-speed internet access and wireless internet connectivity at Northeastern locations around the university's global network
- Centralized computer labs—including the InfoCommons and the Digital Media Commons (DMC) in Boston—with the latest software
- On-site and remote printing for the Northeastern Printing Plan, including an annual credit for \$120 in printing, with the opportunity to add additional funds
- The university's learning management system, Canvas (<https://canvas.northeastern.edu>)
- Free or discounted software applications for Windows and Mac, available online, for download or in a virtual environment
- Northeastern's online portal, myNortheastern (<https://my.northeastern.edu/>)
- Licenses and support for Microsoft Office 365 (<https://office365.northeastern.edu/>), including web and download versions of Outlook, Word, Excel, PowerPoint, Teams, and OneDrive
- The SAIL digital platform (<https://sail.northeastern.edu/>), an app and online portal to facilitate Northeastern's integrated learning environment
- High-performance research computing (<https://rc.northeastern.edu/>)
- Resources for teaching assistants and graduate assistants in choosing and implementing academic technologies (<https://academictechnologies.northeastern.edu>) for a wide range of classroom goals

## IT Service Desk and Support

Tech Service Portal (<https://service.northeastern.edu/tech/>)  
617.373.HELP [4357]

**help@northeastern.edu**

Walk-up support, 2<sup>nd</sup> Floor, Snell Library

The IT Service Desk provides phone, chat, and walk-up technology assistance to the university community, 24 hours a day, 7 days a week. The IT Service Desk staff also provides support for ITS-managed printers and labs, loans out AV equipment and other hardware, troubleshoots and repairs computers, and answers general computing questions.

Most services are available at no additional cost, though some computer repair services may be subject to fees for labor, plus parts. Visit the Tech Service Portal for more information about technical support ([https://service.northeastern.edu/tech?id=tech\\_service/&#38;sys\\_id=a6f49ccbdb3b700a37cd206ca961942](https://service.northeastern.edu/tech?id=tech_service/&#38;sys_id=a6f49ccbdb3b700a37cd206ca961942)).

## Public Safety

*Public Safety Division Administrative Offices*

100 Columbus Place

617.373.2696

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

*Police Operations Center*

100 Columbus Place

617.373.3333 (EMERGENCY—police, fire, medical)

617.373.3934 (TTY emergency or nonemergency)

617.373.2121 (nonemergency regular business)

*Personal Safety*

617.373.2121

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

The Public Safety Division's mission is to provide a comprehensive program of police, security, fire safety, and emergency medical services to help ensure the campus remains a safe and pleasant place to live, work, and learn.

The University Police Department is the largest and most visible unit of the division and consists of professionally trained officers charged with the protection of life and property and the prevention and detection of crime on campus. University police officers have the same authority as municipal police officers and enforce both the Massachusetts laws and university regulations. Regulations mandate that students show their university ID cards whenever requested to do so by any university police officer. For more information, visit the NUPD website (<http://www.northeastern.edu/nupd/>).

The Public Safety Division takes pride in its comprehensive plan to minimize crime and protect the safety of the Northeastern community. But the division needs students' help and urges students to take responsibility for creating and maintaining a safe and secure environment. For tips on safety around campus and in the neighborhood, pick up a brochure or visit the website.

The Personal Safety Escort Service provides a door-to-door escort from one on-campus location to another whenever personal safety is a concern. After receiving your call, the university police dispatcher will assign an officer or cooperative education cadet within 10 to 15 minutes (if necessary, the dispatcher will advise you of any expected delays).

A special, nighttime off-campus escort service runs from dusk to dawn to transport students who reside within approximately one mile of the campus from the campus to their residence after dark. The only destination this service will take you to is your residence. A van stops at Snell Library and the Ruggles Public Safety Substation on the hour from 7:00 p.m. to 6:00 a.m. to pick up students.

If you are sexually assaulted, either by a stranger or an acquaintance, get to a safe place, then telephone the university police and a friend or family member. A university police officer who is a state-certified sexual assault investigator will meet with you and address your physical and emotional needs, as well as inform you of your rights and options regarding filing charges against the perpetrator. The police will provide you with important information about on-campus as well as off-campus counseling services as well as other options regarding changing your residence or class schedule.

If the sexual assault took place off campus, the university police department can still provide emergency medical treatment, transportation to a medical facility, and counseling referrals. However, the criminal investigation of such cases is the responsibility of the police department that has jurisdiction in the locale where the assault took place, and university police will assist you with making contact with the appropriate agency.

## Lost and Found

Website (<https://www.northeastern.edu/nupd/services/lost-found/>)

If you have lost an item on Northeastern's Boston campus, call 617.373.3913. You will be instructed to leave a detailed message describing the item lost and the best way to contact you if the item is found.

If your item has been turned in, we will contact you by telephone or mail. If your item has not been turned into our department, we will continue to keep this information on file.

If you suspect the item has been stolen, call the Northeastern University Police at 617.373.2121 to report the theft.

If you have found an item on campus, return it to our headquarters located at 100 Columbus Place.

## Emergency Information

617.373.2000 (snow emergencies)

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

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

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

NU ALERT, emergency broadcast communication messages, are sent to the email addresses and telephone numbers students, faculty, and staff have provided the university.

## College Expenses

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

- Financial Aid (p. 21)
- Bill Payment (p. 22)
- Financing Options (p. 23)
- Tuition, Room, Board, and Fees Per Semester (p. 23)

## Financial Aid

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

## How to Apply

To apply for federal financial aid, freshmen and transfer students must submit the Free Application for Federal Student Aid (FAFSA) (<https://studentaid.gov/h/apply-for-aid/fafsa/>). Additionally, for institutional aid consideration, freshmen and transfer students must also complete the CSS Profile (<https://cssprofile.collegeboard.org/>). Returning students must submit the FAFSA each academic year. Students are encouraged to submit their financial aid application materials by the priority filing deadline date to ensure that they are considered for all available financial aid programs for which they qualify. To view the priority filing deadline dates, 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 Student Financial Services representative.

## Change in Enrollment Status

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

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

## Outside Sources of Aid

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

## Return of Title IV Aid

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

## Verification

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

## Change in Circumstances

If a student believes that the aid process does not accurately reflect their financial situation, or if family circumstances change during the year, the

student should notify Student Financial Services for further evaluation. For additional information, please refer to the Student Financial Services website (<https://studentfinance.northeastern.edu/policies-procedures/changes-in-financial-circumstances/>).

## Bill Payment

Full payment of tuition, residence hall fees, and other related charges are due prior to the start of the term as specified on the original bill. A past-due balance may result in late fees, prevention of registration, prevention of grade release, prevention of participation in global study programs, or withdrawal from the university.

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

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## Payment of Tuition

Accepted methods of payment are:

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

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

## Student Financial Responsibility Agreement

As compelled by federal law, all students who enroll in classes at Northeastern University are required to complete and accept the Student Financial Responsibility Agreement (SFRA) (<https://studentfinance.northeastern.edu/billing-payments/sfra/>). This agreement must be completed once per academic year and is located on the

student's myNortheastern portal. Failure to complete the SFRA will result in a hold that prevents registration.

## Discrepancies in Your Bill

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

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

## Overloads/Reduced Loads

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

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

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

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

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

## Delinquent Balances

In cases of student default on tuition payments, the student may be withdrawn from the university and is liable for the outstanding tuition, as well as for all reasonable collection costs and any legal fees incurred by the university during the collection process. Accounts may be subject to monthly interest charges. *Transcripts and other academic records will not be released until all financial obligations to the university have been met.*

## Refunds on Credit Balances

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

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

## Refunds for Withdrawal from the University—General Information

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

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

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

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

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

## Refunds for Course Withdrawals

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

## Refunds for Complete Withdrawal from the University

### FULL SEMESTERS

Official withdrawal during the first week	100% refund
Official withdrawal during the second week	100% refund
Official withdrawal during the third week	100% refund
Official withdrawal during the fourth week	60% refund
Official withdrawal during the fifth week	40% refund
Official withdrawal after the fifth week	no refund

### SUMMER HALF SEMESTERS

Official withdrawal during the first week	100% refund
Official withdrawal during the second week	100% refund
Official withdrawal during the third week	50% refund

Official withdrawal during the fourth week 25% refund

Official withdrawal after the fourth week no refund

## Disability Resource Center Adjustments

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

## Financing Options

### Northeastern’s Monthly Payment Plan

Northeastern University offers a monthly payment plan, administered through Nelnet Campus Commerce, which allows students and families to divide their educational costs into smaller, more manageable installments. In using this plan, it can reduce your need to borrow, thereby, reducing the overall cost of education and can be combined with your financial aid award or other 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. When researching the loan and lender that best meet your needs, make sure you take into consideration the interest rate, the quality of customer service, as well as any origination, disbursement, and/or repayment fees.

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

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

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

## Total Estimated Costs

The total, estimated costs for students living in university housing and enrolled in the 17-meal plan for the 2020–2021 academic year are as follows:

### TUITION AND FEES

	Per Full Semester	Per Summer Half Semester
Tuition	\$27,180	\$13,590
Student Center Fee	\$70	\$35
Student Activity Fee	\$148	
Campus Recreation Fee	\$60	\$35



Undergraduate Student \$310  
Fee

### ROOM, BOARD, AND FEES PER SEMESTER

	Per Full Semester	Per Summer Half Semester
Residential Student Fee	\$32	\$16
Housing	range from \$4,785–\$6,125 <sup>1</sup>	approximately 1/2 of semester rate <sup>1</sup>
17-Meal Plan <sup>2</sup>	\$3,955	\$1,978

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

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

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

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

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

### Patterns of Attendance

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

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

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

The co-op schedule is flexible, but generally, students alternate periods in class with periods on co-op. All students are required to complete their program in the classroom, rather than on a co-op assignment, so their last semester will be in the classroom. For specific patterns of attendance for particular majors, consult the program plan for that major.

### Fees Required of All Students

The following fees are required of all students:

#### APPLICATION FEE

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

#### ENROLLMENT DEPOSITS

A nonrefundable enrollment deposit, which is applicable toward the first semester’s bill, is due by January 15, 2020, for students admitted

for Early Decision I, by February 20, 2020, for students admitted for Early Decision II, and by May 1, 2020, from all other accepted freshman students entering the university in September 2020. Please note, enrollment deposit deadlines for students applying Early Decision I and Early Decision II may vary year to year. Students entering at other times of the year, and transfer students, should note the required deposit due date on their application status check.

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

#### UNDERGRADUATE STUDENT FEE

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

#### STUDENT FEES

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

#### CAMPUS RECREATION FEE

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

#### HUSKY CARD (PHOTO-IDENTIFICATION CARD)

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

#### NORTHEASTERN UNIVERSITY STUDENT HEALTH PLAN (NUSHP)

Since September 1989, Massachusetts law (Massachusetts General Laws, Chapter 15A, Section 18) has required every full-time and part-time 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. University housing is required for all first- and second-year students entering as freshmen. The upperclass housing deposit is \$200 for each full semester and for each summer half semester.

**RESIDENCE HALL ACTIVITIES FEE**

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

**LATE FEES**

Late fees can be placed on accounts any time after the due date, if the account remains fully or partially unpaid. The university typically waits, however, until after the conclusion of the add/drop period, for the specified semester, prior to assessment of late fees. These fees are based on the amount past due at the time of assessment and can range from \$75 to \$200. Late fees are assessed once per semester.

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

**INTERNATIONAL STUDENT FEE**

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

**Room and Board****ROOM RATES PER SEMESTER**

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

**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 waiting list.

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 <sup>1</sup>
Week 2	90 percent <sup>1</sup>
Week 3	80 percent <sup>1</sup>
Week 4	60 percent <sup>1</sup>

Week 5	40 percent <sup>1</sup>
After week 5 <sup>2</sup>	0 percent <sup>2</sup>

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

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

**Summer Half Semesters**

Official Withdrawal from University	Room Charge Credited
Week 1	100 percent <sup>1</sup>
Week 2	75 percent <sup>1</sup>
Week 3	50 percent <sup>1</sup>
Week 4	25 percent <sup>1</sup>
After week 4 <sup>2</sup>	0 percent <sup>2</sup>

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

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

**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.

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 Charged	For Fall Semester	For Spring Semester	For Summer 1	For Summer 2
Deposit refunded; no charge	Before 5/15/20	Before 10/1/20	Before 3/1/21	Before 4/15/21
25 percent of term room charge <sup>1</sup>	After 5/15/20	After 10/1/20		After 4/15/21
50 percent of term room charge <sup>1</sup>	After 6/15/20	After 10/15/20	After 3/15/21	After 4/30/21
75 percent of term room charge <sup>1</sup>	After 7/15/20	After 11/1/20	After 4/1/21	After 5/15/21
100 percent of term room charge <sup>1</sup>	After 8/1/20	After 12/1/20	After 4/15/21	After 5/31/21

<sup>1</sup> 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 traditional Unlimited, 17-, or 12-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 12-meal plan except for those living in university apartments with kitchen facilities.

Freshmen living in university apartments with kitchen facilities are required to have at least a 7-meal plan.

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

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

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

The traditional meal plan rates for 2020–2021 are shown below. For more information about meal plan rates, visit the tuition and fees webpage (<https://studentfinance.northeastern.edu/billing-payments/tuition-and-fees/>).

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

### PROFILER MEAL PLANS

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

Profiler meal plans end in August at the end of summer 2 semester. Students are advised to pay close attention to the end dates, as unused meals do not roll over and will not be refunded. 2020–2021 dates and dining locations are to be determined. Please visit NU Dining Services (<http://www.nudining.com>) for the most up-to-date information.

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

The profiler rates for 2020–2021 are shown below. For updated rates, visit the Tuition and Fees webpage (<https://studentfinance.northeastern.edu/billing-payments/tuition-and-fees/>).

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

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

### Husky Dollars

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

## Academic Policies and Procedures

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 Honors (p. 26)
- Academic Integrity Policy (p. 27)
- Academic Progression Standards (p. 27)
- Accommodations for Students with Disabilities (p. 28)
- Attendance Requirements (p. 28)
- Course Credit Guidelines (p. 29)
- Degrees, Majors, and Minors (p. 29)
- Family Educational Rights and Privacy Act (FERPA) (p. 31)
- Final Examinations and Related Policies on Other Exams and Final Term Papers/Projects (p. 32)
- Graduation Requirements (p. 32)
- Leaves of Absence and University Withdrawal (p. 33)
- Personal Information (p. 34)
- Registration and Taking Courses (p. 34)
- Student Bill of Academic Rights and Responsibilities (p. 37)
- Student Evaluation of Courses (TRACE) (p. 39)
- Student Records, Transcripts, and Related Policies (p. 39)
- Student Right-to-Know Act (p. 41)

## Academic Honors

### Dean's List

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

### Graduation with Honors

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

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

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

## University Honors Program Distinction

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

## 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 Integrity Policy

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

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

## Honor Code

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

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

## Code of Student Conduct

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

## Academic Progression Standards

## Faculty Advisor Communication Tool (FACT)

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

warnings and/or progress reports for student-athletes are necessary for NCAA compliance.

## Academic Status

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

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

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

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

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

In addition, many programs require that specific courses be successfully completed to progress to the next year. Students who do not make satisfactory progress will not graduate with their class and may be withdrawn. For more information about additional academic progression standards for each college, program, or major, refer to the curriculum guidelines that can be found in the college sections of this catalog. See financial aid implications under 'Financial Aid (p. 21).'

## 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. 39) and Clearing an Academic Deficiency (p. 39)

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

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

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

## Accommodations for Students with Disabilities

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

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

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

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

## Attendance Requirements

Class participation is essential to success no matter the course format or its delivery; therefore, attendance is mandatory. Individual instructors may have additional, course-specific, attendance policies. It is the student's responsibility to ascertain what each instructor requires.

Failure to meet attendance requirements may force a student to drop the applicable courses. Students should not make conflicting commitments until the class schedules for each semester are final. Permission to make up work may be granted by instructors for reasonable cause. Requests must be made immediately upon a student's return to class. Laboratory work can be made up only during the hours of regularly scheduled instruction.

## Absence Because of University-Sponsored Activities

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

Students must discuss absence(s) with instructors at least two weeks in advance of the university-sponsored activity, or as soon as possible if the activity is at the beginning of the term or is the result of an unforeseen circumstance. Instructors may require a written statement from the administrator in charge of the activity. Instructors are expected to make reasonable accommodations for these class absences, including administration of makeup assignments and exams whenever possible. It is expected that students seeking an excused absence will develop a plan and timetable to make up the missed 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, may cause a student to be absent from class. Students must notify their instructors and academic advisor, as appropriate, as soon as possible to apprise them of the circumstances leading to their absence, as well as how much time will be missed. Students must work with their instructors to develop a plan, with a timetable, to make up missed course work. Students cannot be required to provide medical documentation. (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.) Instructors are expected to make reasonable accommodations

for warranted class absences, including administration of makeup assignments and exams, whenever possible.

## Extended Absences

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

## Nonattendance

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

## Course Credit Guidelines

### Guidelines for Assigning Credit to Courses

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

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

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

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

### NOTE ABOUT HOMEWORK AND STUDENT PREPARATION FOR CLASS

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

## CREDIT ASSIGNMENT PROCESS

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

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

## DEFINED INSTRUCTIONAL METHODS

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

## FULL-TIME AND HALF-TIME EXPERIENCES

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

- Full-time experiences: 32–40 hours per week in a semester for a minimum of 11 weeks or 55 days, or in a quarter for 9 weeks or 45 days
- Half-time experiences: 20–31.99 hours per week in a semester for a minimum of 11 weeks or 55 days, or in a quarter for 9 weeks or 45 days (to achieve full-time status, graduate students must take 3 or more academic credits and undergraduate students must take 4 or more academic credits)
- Summer 1 or Summer 2 semester: minimum of 5 weeks or 25 workdays
- Summer quarter: 6 weeks or 30 workdays

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

## Degrees, Majors, and Minors

### Declaring Majors and Minors

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

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

### Changing Majors

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

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

Students who are considering a major change must discuss their change in person with an adviser in the receiving major. See the online list of advising offices (<http://www.northeastern.edu/registrar/changemajor-offices.html>). The adviser 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. Advisers will discuss the student's ability to succeed in the desired program given the current academic record as well as the influence of changing major on the student's ability to obtain a degree in the desired program within the traditional eight-academic-term time frame.

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

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

### Northeastern Explore Program

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

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

### Double Major

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

### Second Northeastern University Bachelor's Degree

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

diploma will be awarded and the second degree will be noted on the transcript.

Students must complete an application with the home college of the intended degree. Some programs may require prerequisites prior to admission. Students should apply by the normal transfer deadline to ensure timely consideration. The college makes the determination on admission; notifies the student of this decision; and, if the student is admitted, provides the student with a program of study and reactivates the student's record. International students must consult with an adviser 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. (<https://registrar.northeastern.edu/article/combined-majors/>)
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. (<https://registrar.northeastern.edu/article/combined-majors/>)
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 (<https://registrar.northeastern.edu/article/combined-majors/>) 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, advisers from both disciplines will be designated, and one will be identified as the primary adviser. 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 advisers representing the two disciplines must be held to plan the combined-major curriculum and to consider NUPATH requirements. See the online list of discipline advisers and college contacts for new student-

requested 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. 45))

- 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 adviser 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 adviser 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/>). (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>)

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

### Minors

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

## Family Educational Rights and Privacy Act (FERPA)

### FERPA for Students—General Information

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

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

### FERPA General Guidance for Parental Disclosure

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

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



## Release of Directory Information

The primary purpose of directory information is to allow Northeastern University to confirm attendance for employers, health insurance companies, and loan agencies. Northeastern may disclose appropriately designated "directory information" without written consent, unless you have advised the university to the contrary in accordance with the procedures below. If you choose not to release directory information, all communications with all third parties and agencies will need to be done through your written request to the university or in person.

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

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

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

## Notification of Rights under FERPA

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

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

administrative, supervisory, academic, or support staff position (including law enforcement unit and health staff); a person or company with whom the university has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a person assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

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

## Additional Information

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

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

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

- Final examinations are normally two hours in length and must be held when and where scheduled. Final exams are held during a designated final exam period at the end of the semester. An examination schedule is posted at the beginning of each semester at the final-exam 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 (<https://my.northeastern.edu/>) under 'My Schedule' in the 'Self-Service' tab approximately the fourth week of the term.
- Students who have two examinations scheduled at the same time or three exams on the same day may complete and submit the Final Exam Conflict form (<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.

## Graduation Requirements

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

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

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

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

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Residency Requirement

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

## Commencement

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

## Leaves of Absence and University Withdrawal

### 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/uwcs/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 re-entry 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.

## 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. Official documentation of the name change is required.

### Change of Address

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

## Registration and Taking Courses

Students are expected to register for classes during the published registration times in the academic calendar. Freshmen may be preregistered for some or all of the courses they need. Most registration after the freshman year is accomplished through the myNortheastern web portal (<https://my.northeastern.edu/>). Students must complete “I Am Here” registration just prior to the start of classes to remain enrolled. Class adds must be registered by the end of the seventh class day.

### Class Schedule

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

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

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

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

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

### Fall and Spring Schedule

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

### Summer Schedule

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

Sequence C	TuTh	8:00–11:30
Sequence D	TuTh	1:30–5:00

### Course Syllabus

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

### Course Prerequisites

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

### Overload Policy

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

### Reduced Load Policies

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

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

International students must speak with an adviser 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 adviser approval and meet the prerequisites and any other required approvals for the class. Instructor permission as well as approval by the associate dean of the college offering the course is required. The coursework required is at the discretion of the instructor. Once a student opts to audit a course, the audit status of the course cannot be changed. First-year students may not audit classes. A signed Petition to Audit (<http://www.northeastern.edu/registrar/form-petition-to-audit.pdf>) must be



presented to the Office of the Registrar during the designated audit-add period. Excluded courses are co-op, labs, language courses, any off-campus course, any online course, and any course required for the major or degree. Audits carry no academic credit.

### Pass/Fail (S/U) System

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

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

### Taking 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 coursework for their degree at Northeastern; or an entity in a formal contractual, consortial, or partnership relationship with Northeastern; or at an

approved study-abroad program. In some cases, in order to clear a deficiency, to permit students access to courses deemed by their respective advisors and colleges to be important for their education but unavailable to them at Northeastern, or to remain on track for graduation, a student may petition their college for permission to take a course at another accredited institution.

With the approval of the college academic adviser 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 adviser. The Office of the Registrar validates accredited institutions to ensure credit transferability. The student must earn a C (2.000) or better for a course to be considered for transfer. Students are responsible for providing documentation on the institution's accreditation, course grading, and course descriptions prior to approval.

### Special Students

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

### Dropping Courses

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

#### IN FALL AND SPRING SEMESTERS

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

#### IN SUMMER HALF SEMESTERS

- Through the second week of the half semester, students may withdraw without any grade being posted to the transcript. Courses may be dropped via the myNortheastern web portal (<https://my.northeastern.edu/>).
- Between the third week and the last day of classes, course withdrawals are indicated by a W on the student's record. Courses may be dropped via the myNortheastern web portal (<https://my.northeastern.edu/>). No financial adjustment is made for courses receiving a W grade.

- After the last day of classes, no withdrawals are accepted for any reason. A letter grade for the course will be posted on the transcript.
- Dropping below full-time enrollment (8 semester hours for summer half semesters) may affect financial aid.

### Late Admission to a Course

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

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

## Student Bill of Academic Rights and Responsibilities

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

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

### Course-Related Rights

#### Article 1

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

#### Article 2

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

#### Article 3

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

#### Article 4

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

timely manner, suggested to be at least 10 business days prior to the new deadline.

#### Article 5

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

#### Article 6

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

#### Article 7

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

#### Article 8

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

### Rights to University Academic Services

#### Article 9

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

#### Article 10

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

#### Article 11

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

#### Article 12

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

### Scheduling Rights

#### Article 13

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

**Article 14**

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

**Article 15**

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

**General Academic Rights**

**Article 16**

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

**Article 17**

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

**Article 18**

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

**Article 19**

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

**Article 20**

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

**Article 21**

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

**Student Responsibilities**

**Article 1**

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

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

**Article 2**

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

**Article 3**

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

**Article 4**

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

**Article 5**

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

**Article 6**

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

**Article 7**

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

**Article 8**

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

**Article 9**

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

**Article 10**

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

**Article 11**

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

**Article 12**

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

## Article 13

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

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

- <sup>1</sup> The student rights, through their representatives in the Student Government Association (SGA), described in these sections arise from faculty and staff employment responsibilities and obligations to the university. Northeastern University students recognize and accept that it is the sole prerogative of the university to enforce these obligations and responsibilities and to determine whether and to what extent they are being carried out or violated in specific instances. Northeastern University students recognize and accept that their ability to effect redress of complaints arising from these rights is limited to the procedures specified in the current *Undergraduate Student Handbook*.
- <sup>2</sup> The articles shall be interpreted by the Office of the Provost in conjunction with the Office of the Vice President for Student Affairs, and shall be monitored by the Student Government Association. Further, should any student discover that they have been subject to any violation of the principles stated herein, the student should follow the appropriate complaint resolution procedure in the *Undergraduate Student Handbook* (<http://www.northeastern.edu/osccr/code-of-student-conduct/>). The Student Government Association, if requested by the student, will monitor the progress of any student academic grievances.
- <sup>3</sup> Because the university operates on a twelve-month calendar in an urban environment, many construction, remodeling, renovation, and repair projects must take place while the university is in session, and other potential distractions from the learning process arise from the surrounding urban environment on which it is dependent but over which it exerts little or no control. Thus, though the university is committed to maintaining an appropriate learning environment for its students, Northeastern University students recognize and accept, as part of their relationship with the university, that the conditions described above may cause occasional disturbances to that environment.
- <sup>4</sup> For more on academic freedom, please refer to the AAUP's definition (<https://www.aaup.org/report/1940-statement-principles-academic-freedom-and-tenure/>).

## Student Evaluation of Courses (TRACE)

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

## Student Records, Transcripts, and Related Policies

### Pass/Fail System Grade Table

Grades are officially recorded by letters, evaluated as follows.

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

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

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

## Course Comments

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

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

## Northeastern University Course Numbering

0001–0999	<b>Orientation and basic</b>
	No degree credit

### UNDERGRADUATE

1000–1999	<b>Introductory level (first year)</b>
	Survey, foundation, and introductory courses, normally with no prerequisites and designed primarily for students with no prior background

2000–2999	<b>Intermediate level (sophomore/junior year)</b>
	Normally designed for sophomores and above but in some cases open to freshman majors in the department

3000–3999	<b>Upper-intermediate level (junior year)</b>
	Designed primarily as courses for juniors; prerequisites are normally required, and these courses are prerequisites for advanced courses

4000–4999	<b>Advanced level (senior year)</b>
	Designed primarily for juniors and seniors; also includes specialized courses such as research, capstone, and thesis

### GRADUATE

5000–5999	<b>First-level graduate</b>
	Courses primarily for graduate students and qualified undergraduate students with permission

6000–6999	<b>Second-level graduate</b>
	Generally for master's and clinical doctorate only

7000–7999	<b>Third-level graduate</b>
	Master's- and doctoral-level courses; includes master's thesis

8000–8999	<b>Clinical/research/readings</b>
	Includes comprehensive exam preparation

9000–9999	<b>Doctoral research and dissertation</b>
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## Clearing an Incomplete or Changing Other Grades

The period for clearing an incomplete grade or for changing a grade other than an incomplete or failure (F or U) is restricted to one calendar year from the date it is first recorded on the student's permanent record. An incomplete grade may be reported by the instructor when a student has failed to complete a major component of a required course, such as homework, a quiz or final examination, a term paper, or a laboratory

project. Students may make up an incomplete grade by satisfying the requirements of the instructor or, if the instructor is absent, the chair of the department. Be aware that instructors' policies on the granting of incomplete grades may vary and that the final decision on an incomplete grade is up to the instructor.

To request an incomplete grade, the student must obtain and complete in consultation with the instructor an Incomplete-Grade Contract (<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 coursework must be completed within one calendar year from the end of the term in which the course was offered.)

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

## Repeating Courses

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

## Substituting Courses

In some cases, it may not be possible to repeat a course if a student wishes to do so. In unusual circumstances, students may petition to substitute one course for another they have already taken, as long as the subject matter of both courses is substantially alike. With the approval of the student's academic adviser 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 adviser before enrolling in any proposed substitute course. Students are required to pay normal tuition charges for all substitute coursework.

## Clearing an Academic Deficiency

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

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

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

1. Repeat the same course at one of Northeastern's colleges, which will result in a "repeat" grade (see "Repeating Courses" policy above).



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

## Appeal of Final Grades

Under certain circumstances, students have the right to appeal final grades given by either academic faculty or cooperative education coordinators. Criteria and procedures for such appeals can be found on p.1 of the Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>) or on the appeals policies and procedures page (<http://catalog.northeastern.edu/graduate/academic-policies-procedures/appeals/>) within the graduate portion of the university catalog.

## Grade-Point Average (GPA)

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

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

The GPA for both courses would then be the total weight (16) divided by the total semester hours (5), or 3.200. Grades of I, IP, S, U, and X are not included in the calculation of the GPA. See Grade Table (p. 39) for a complete list of grades and numerical equivalents.

## Grade Reports

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

## Transcripts

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

TTY 617.373.5360

## Pass/Fail System

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

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

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

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

## Student Right-to-Know Act

For information about the Student Right-to-Know Act, visit the Registrar's website. (<http://www.northeastern.edu/registrar/right-to-know.html>)

## University Academics

- NUPATH (p. 42)
- University-Wide Requirements (p. 46)
- Living and Learning Communities (p. 46)
- Experiential Learning (p. 46)
- Cooperative Education (p. 46)
- Research and Creative Activity (p. 47)
- Service-Learning (p. 47)
- Global Experience (p. 47)
- World Languages Center (p. 49)
- University Honors Program (p. 49)
- Explore Program (p. 49)
- Premedical and Other Preprofessional Health Career Preparation (p. 50)
- Pre-Law Advising (p. 50)
- Education (p. 51)

- Army, Air Force, and Navy Reserve Officers' Training Corps (ROTC) Programs (p. 51)
- General Studies Program (p. 52)
- About Sample Curricula (p. 52)
- Undergraduate Degrees (p. 52)
- Undergraduate Internships (p. 53)

## NUpaht

### Learning, Knowing, Doing, Leading

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

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

- Requirements (p. 42)
- Learning Goals (p. 42)
- Writing-Intensive Courses (p. 45)
- Additional Requirements for BA Students (p. 45)

## NUpaht Requirements

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

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Differences and Diversity
- Employing Ethical Reasoning
- Writing across Audiences and Genres
- Integrating Knowledge and Skills through Experience

- Demonstrating Thought and Action in a Capstone

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

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

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

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

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

Transfer credits cannot be used to fulfill the capstone or experiential requirements. Of the writing requirements (p. 45), only the first-year writing requirement can be met by transferred or placement test credits.

## NUpaht Learning Goals

Established and assessed learning goals ensure rigorous opportunities for students to achieve the essential skills and competencies of NUpaht regardless of the context or course within which the learning occurs. Any course that meets a NUpaht requirement incorporates the learning goals

of that requirement. The requirement short name and/or user code is what will appear in course descriptions and student audits.

## Engaging with the Natural and Designed World

**Short Name: Natural and Designed World**

**User Code: ND**

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

### LEARNING GOALS

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

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

## Exploring Creative Expression and Innovation

**Short Name: Creative Expression/Innovation**

**User Code: EI**

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

### LEARNING GOALS

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

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

## Interpreting Culture

**Short Name: Interpreting Culture**

**User Code: IC**

Students study and analyze cultural practices, artifacts, and texts (e.g., visual art, literature, theatrical performances, musical compositions, architectural structures). They learn critical reading and observation strategies and how traditions of theoretical, aesthetic, and/or literary criticism provide different lenses for the interpretation of cultural objects and practices.

### LEARNING GOALS

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

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

## Conducting Formal and Quantitative Reasoning

**Short Name: Formal/Quantitative Reasoning**

**User Code: FQ**

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

### LEARNING GOALS

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

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

## Understanding Societies and Institutions

**Short Name: Societies and Institutions**

**User Code: SI**

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

### LEARNING GOALS

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

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

## Analyzing and Using Data

**Short Name: Analyzing and Using Data**

**User Code: AD**

Students study and practice methods and tools of data analysis and use. Students learn about the structure and analysis of at least one type of data (e.g., numbers, texts, documents, web data, images, videos, sounds, maps) and acquire the skills to examine, evaluate, and critique such data; extract patterns; summarize features; create visualizations; and

provide insight not obvious from the raw data itself. Students also learn to be sensitive to ethical concerns associated with data: security, privacy, confidentiality, and fairness.

### LEARNING GOALS

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

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

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

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

### Writing Across Audiences and Genres

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

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

**Note: This requirement is met by four courses. See more details under Writing-Intensive Courses (p. 45).**

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

#### Learning goals for first-year writing:

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

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

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

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

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

### Integrating Knowledge and Skills Through Experience

**Short Name: Integration of Experience**

**User Code: EX**

Students study and practice the principles and strategies of experiential learning. Through direct experience and reflection on that experience, they learn to recognize and articulate their knowledge and skills, to apply the knowledge and skills they learn in one context to another context, and to determine what knowledge and skills they need to develop to meet their goals.

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

- Apply knowledge and skills in new, authentic contexts.
- Gain new knowledge and develop new skills to successfully engage in unfamiliar tasks and activities.

C. Integrate and use the deepened knowledge and skills as well as the newly gained knowledge and skills to continue to learn in their academic programs.

D. Articulate how and what one learns across a range of contexts.

## Demonstrating Thought and Action in a Capstone

**Short Name: Capstone Experience**

**User Code: CE**

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

## Writing-Intensive Courses

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

### First-Year Writing Requirement

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

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

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

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

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

*Note:* Introductory First-Year Writing (ENGW 1110) is 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 non-native speakers of English are also offered. Students should consult with their advisors to choose the section that best suits their needs. Transfer credit cannot be used to satisfy this requirement. Students must earn a C or better to satisfy the advanced writing requirement.

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

### Writing-Intensive Courses in the Major

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

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

### Additional Requirements for BA Students

In addition to successfully completing the university requirements of NUPATH (p. 42), students pursuing a Bachelor of Arts (BA) degree must fulfill the BA core requirements as outlined below.

### Language Requirement for BA Students

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

#### ELEMENTARY-LEVEL PROFICIENCY

Satisfy one of the following requirements:

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

#### INTERMEDIATE-LEVEL REQUIREMENT

Satisfy one of the following requirements:

1. Complete a course at the intermediate level (course number 2101 or higher) in the language taken at the elementary level.
2. Complete a course in which the subject matter focuses on some aspect of the culture, history, or society of a part of the world where the language taken at the elementary level is spoken or used by a significant portion of the population. For a course list, visit the myNortheastern web portal (<https://my.northeastern.edu/>), click on the “Self-Service” tab, then on “My Degree Audit.”
3. Demonstrate proficiency by successfully completing a proficiency interview (scheduled through the World Languages Center). This



option is available only for heritage speakers of a language or for students who have completed the elementary-level language requirement through one of the following:

- a. Advanced placement
- b. Standardized placement exam as outlined above

## 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

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

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

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

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

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

## Cooperative Education

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

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

## General Requirements

- Be a full-time student to participate in co-op.
- Complete all pre co-op requirements as established by the college of the student.
- Make satisfactory progress towards degree completion, including grade point average requirements, as defined by the university, the colleges, and the major program curricula.
- Have a placement in an official co-op placement system with accurate start and end dates, and meet the minimum hour and day requirements.
- Not participate in co-op in the final term unless it is specified in the curriculum requirements of the program in the catalog.
- Resolve any previous disciplinary or academic probation issues, or have the cooperative education coordinator approve a plan to resolve these issues, prior to applying for co-op jobs.
- Have any self-developed co-op approved by the cooperative education coordinator before accepting the position.
- Comply with any pre-employment checks required by the employer, such as drug testing, credit checks, physical examinations, security clearance, and criminal record checks.
- Participate in Title IX training, as required.
- Complete additional requirements if participating in a global co-op. See the Global Experience Office website (<http://www.northeastern.edu/geo/globalcoop/>) for more information.
- Work with the co-operative education coordinator if an Unsatisfactory (U) grade has been received for a past co-op to re-establish eligibility in accordance with the policies and requirements of the college.

## TRANSFER AND INTERNATIONAL STUDENTS:

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

## Academic Requirements

1. **Be full-time while on co-op. Full-time status for co-op is defined as either:**
  - a. one full-time co-op job; 32-40 hours per week, or
  - b. two simultaneous half-time co-op jobs; 20-31.99 hours each, or
  - c. one half-time co-op job; 20-31.99 hours with graduate students taking 3 or more academic credits or undergraduate students taking 4 or more academic credits.

- i. Undergraduate students on co-op in a Summer 1 or Summer 2 term may be registered for one half-time co-op without acquiring a second job or taking an accompanying class.
2. **Meet the minimum length requirements for an academic term:**
  - a. Semester full-term: minimum of 11 weeks or 55 work days
  - b. Quarter full-term: minimum of 9 weeks or 45 work days
  - c. Summer 1 or Summer 2 term: minimum of 5 weeks or 25 work days
3. **Receive a grade of Satisfactory or Unsatisfactory for the co-op experience.**

## Registration for Co-op

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

## Co-op Financial Planning

- No tuition is charged while a student is on co-op only (students will pay room and board if they stay in university housing).
- If a student takes a credit-bearing class while on co-op, tuition will be charged at the per-credit rate.
- Financial aid will be distributed to match the student's tuition bill and other allowable expenses.
- Students on co-op are required to maintain the same health insurance coverage (either through a private provider or through the university program) as they would while attending classes.

## Further Information

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

## Research and Creative Activity

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

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

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

The Office of Undergraduate Research and Fellowships, along with other offices and programs on campus, support students through workshops, mentoring, and consultation on applications for distinguished fellowships

and advanced study; funding through the university-wide Project-Based Exploration for the Advancement of Knowledge, or PEAK Experiences Awards; and much more. Northeastern undergraduates are an important part of Northeastern's research culture, and they frequently present their findings at national and international conferences; in scholarly journals; and at the university's annual Research, Innovation, and Scholarship Expo. We believe that the best answers—and the best questions—are born out of bringing diverse perspectives, experiences, and knowledge into conversation with one another. Therefore, we believe that a diverse and inclusive community of researchers, creative practitioners, and fellowship applicants not only fosters innovation and creativity but is a precondition of the excellence for which we strive.

## Service-Learning

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

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

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

## Global Experience

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

**Marina Markot, PhD**, Director

Global Experience Office  
140 Cullinane Hall  
617.373.5276  
[geo@northeastern.edu](mailto: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. Many Northeastern students participate in multiple global experiences during their time at the University. Northeastern encourages students to engage with the Global Experience Office as early as possible - global experiences are within reach for all students, with careful planning and collaboration.

## 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. Study-abroad programs

require a GPA of at least 2.500. Some programs may have additional eligibility criteria. Students must also meet the requirements of the host institution abroad. Full information and application deadlines are posted on the GEO website (<http://www.northeastern.edu/studyabroad/>).

## Engage with GEO

The Global Experience Office offers many opportunities for students to explore program opportunities and learn more about the possibilities.

**GEO Website and Social Media Platforms:** Students can engage with GEO through the chat feature on the GEO website (<http://www.northeastern.edu/studyabroad/>), as well as through social media platforms such as Twitter, Facebook, and Instagram. Students are welcome to participate in preparatory webinars, join staff and alumni Q & A, and envision their experience through dynamic photo, video, and written recollections of student experiences.

**GEO Events:** GEO offers a range of events throughout the year to help students answer questions and concerns about the experience, from the application logistics of a specific program, to navigating questions of identity while abroad. Please refer to the GEO Events Calendar on the GEO website, for the list of upcoming fairs, workshops, and info sessions.

**Meet with Peer Advisers:** GEO Peer Advisers provide the unique lens of recent global program participation. They help students navigate the variety of available programs and refine their goals for the experience. Peer Advisers are available to meet with students during office hours, without appointment needed.

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

After choosing a program, students should consult with their departmental or college advisers. 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. **Academic Term Abroad.** Northeastern offers a rich array of study-abroad programs during semester and summer terms. Students join a partner institution for a semester or summer, where they attend classes, participate in student activities, and organize their extracurricular schedules just as they would on campus at Northeastern. Some examples include University of Sydney in Sydney, Australia; Technion: Israel Institute of Technology in Haifa, Israel; 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. **Embedded Programs.** Embedded programming incorporates global experiences into courses taught at Northeastern's Boston campus and provides students with the opportunity to spend 7 to 10 days in a global setting to further punctuate and underscore the subject matter in a meaningful way.
4. **Global Engagement Program.** The Global Engagement Program is an invitation-only program offering select high-talent students in specific academic disciplines a truly global interdisciplinary undergraduate experience through the creation of a learning environment that spans multiple cultures and continents. Students will begin their experience at NCH at Northeastern in London and move throughout Northeastern's global network over four years. Each year and experience is associated with a particular theme connected to the development of a global mindset.
5. **Global Quest** (<https://www.northeastern.edu/geo/global-quest/>). Global Quest is a prestigious opportunity for incoming freshmen who demonstrate outstanding leadership potential and candidacy to become a global citizen. A unique first-year experience, Global Quest combines an accelerated fall semester in Boston with an immersive four-to-six-month experience abroad. In the six-month experiences from January through June, students complete the equivalent of a full semester at a global partner institution as well as an equivalent of NU-Term during the summer, which may include directed research projects, field study, or summer classes at the partner institution.
6. **Global University Network Mobility.** Drawing on its network of regional campuses, Northeastern offers a set of signature programs, which contextualize, enrich, and enhance student learning. Some examples include the 'Semester and Summer In' programs in San Francisco/Bay area and Seattle, as well as the Data, Ethics, and Culture program in London, England.
7. **International Research.** The focus of a student's time abroad is on an independent research project. In most cases, the study-abroad program organizes small group seminars and field trips that are designed to help students learn about their international environment and focus on a research topic. Students spend three to four weeks toward the end of the semester working on their individual projects. Examples of projects could be studying tropical biology in Costa Rica, history and culture in Vietnam, and oceanography while sailing in the Atlantic/Pacific cruise track of the SEA Semester Program.
8. **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.

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 co-op.

## World Languages Center

**Stacey Katz Bourns, PhD**  
Director

4th Floor, Meserve Hall  
617.373.3131  
Stacey Katz Bourns, Director, s.bourns@northeastern.edu

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

### Placement Assessment

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

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

### Attendance in Language Classes

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

### Auditing Language Classes

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

### Immersion Language Classes

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

### Study-Away/Abroad Classes

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

## 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' individual goals and interests. Our community of intellectually engaged students, faculty, and advisers are committed to engagement in scholarship that will enable students to solve critical societal issues and make a difference at home and in the world. Students benefit from unique and enriched educational options that include stimulating courses and opportunities for research and creative endeavors, global experiences, service-learning, mentoring, and the development of competencies that will position students for lifelong learning and personal and professional success. 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, second, or third semesters who wish to be considered for entry may consult the University Honors Program's website (<http://www.northeastern.edu/honors/>) for application instructions.

## Explore Program

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

**Kim Irmiter, MA**  
Director

1 Meserve Hall  
617.373.2306

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

Undeclared students enroll in a small-cohort first-year seminar taught by a Northeastern academic adviser 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. )”

## PreMed and PreHealth Advising

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

## PreMed and PreHealth Studies

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

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

## Prerequisite Courses

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

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

### BIOLOGY

Two semesters

### GENERAL CHEMISTRY

Two semesters (or a combined general chemistry course)

### ORGANIC CHEMISTRY

Two semesters

### PHYSICS

Two semesters

### MATHEMATICS

One semester each of calculus and statistics

### ENGLISH COMPOSITION/Writing-INTENSIVE

Two semesters

### BEHAVIORAL SCIENCES

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

### ADDITIONAL SCIENCE COURSEWORK

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

- Genetics and molecular biology
- Biochemistry

## Supporting Information

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

### STUDY ABROAD/FOREIGN COURSEWORK

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

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

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

### AP/IB CREDIT

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

### RESOURCES

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

## Pre-Law Advising

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

Located in Employer Engagement and Career Design, Pre-Law Advising at Northeastern enables current students and alumni/ae to explore the legal field as a career path and helps them navigate the law school application process. Since most law school admission committees



give no special preference to any particular undergraduate major, Northeastern encourages students to pursue the undergraduate major of your choice, supplemented with robust co-op, leadership, and service experiences. Academically, we guide students to enroll in challenging courses that develop core skills and values, such as analytical and problem-solving skills, research, critical reading, oral and written communication, organization and project management, public service, and promotion of justice.

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

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

## Education

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

**Joseph Griffin, DMin, PMP®**  
Interim Associate Dean  
Graduate School of Education

41 Belvidere  
617.768.7532  
[jo.griffin@northeastern.edu](mailto:jo.griffin@northeastern.edu) (<http://catalog.northeastern.edu/undergraduate/university-academics/education/jo.griffin@northeastern.edu>)

Northeastern University’s Department of Education offers a Master of Arts in Teaching (MAT) PlusOne program (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>). The program provides a pathway for undergraduate students 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.

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

### Army ROTC Program

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

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

The Department of Military Science offers the Army Reserve Officers’ Training Corps (ROTC) program. The goal of the program is to develop leadership potential in men and women and to prepare them for an

officer’s commission in the Active Army, Army Reserve, or Army National Guard. The curriculum teaches principles of leadership and personnel management and seeks to develop leadership traits such as teamwork, responsibility, initiative, self-confidence, and discipline.

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

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

or call 617.373.2376

Completion of the Army ROTC program will lead to a commission as a second lieutenant in the 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 decision-making skills. ROTC also provides nursing cadets an opportunity to participate in the Nurse Summer Training Program (NSTP). NSTP is a paid, three-to-four-week, hands-on clinical elective for Army ROTC nurse cadets. This elective is conducted at more than 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 Navy ROTC unit is a six-school consortium that includes students from Boston University, Boston College, Northeastern, Tufts, Harvard, and MIT. All Navy ROTC scholarships assigned to Northeastern (NEU) are for nursing 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, students must fulfill a four-year active-duty commitment.

NROTC nursing students are required to take four naval science classes, in addition to their regular coursework, and attend a weekly 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 covered by the Navy during summer training sessions. For more information, contact the recruiting officer at 617.353.0474 or navyrotc@bu.edu.

### Air Force ROTC Program

Air Force ROTC is an educational and leadership program designed to give men and women the opportunity to become an Air Force 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, up to \$18,000 per year, capped at \$9,000 per semester. Scholarship winners will also receive a monthly stipend, a book allowance, and uniforms. Applications for scholarships are due by January 17 of senior year. Apply at the Air Force ROTC website (<http://www.AFROTC.com>).

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

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

## Academic Progression Standards

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

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

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

### Transitioning to Major

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

### Academic Probation

Same as university standards.

### University Withdrawal, Low Scholastic Performance

Same as university standards.

## 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)

### Khoury College of Computer Sciences

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

### College of Engineering

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

- Bachelor of Science in Industrial Engineering
- Bachelor of Science in Mechanical Engineering

### Bouvé College of Health Sciences

- Bachelor of Science
- Bachelor of Science in Nursing
- Bachelor of Science in Rehabilitation Science
- Doctor of Pharmacy (six-year program)
- Doctor of Physical Therapy (six-year program)

### College of Science

- Bachelor of Arts
- Bachelor of Science

### College of Social Sciences and Humanities

- Bachelor of Arts
- Bachelor of Science

## Undergraduate Internships

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

## College of Arts, Media and Design

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

**Elizabeth Hudson, PhD**, Dean

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

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

**Hilary Poriss, PhD**, Associate Dean for Academic Affairs, Faculty, and Research

**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

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

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

The college offers Bachelor of Arts, Bachelor of Science, and Bachelor of Fine Arts degrees in a number of majors, as well as interdisciplinary combined majors with every college across the university, and offers opportunities for nonmajors to engage in the college through NUPATH and

an extensive offering of minors. Opportunities available to students in the College of Arts, Media and Design include national and international programs for study and experience; programs in field settings, both local and abroad; and programs involving affiliations in such areas as professional performing arts organizations and media organizations. The college also emphasizes experiential learning through cooperative education; service-learning; and other kinds of internships, student-faculty research collaborations, and study abroad.

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

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

## Academic Advising

The College of Arts, Media and Design has an academic advising (<https://camd.northeastern.edu/undergraduate-students/undergraduate-advising/>) system that consists of academic advisors located in the Academic Advising and Cooperative Education office 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/undergraduate-students/undergraduate-advising/>). Prelaw advising (<https://careers.northeastern.edu/article/pre-law/>) and premedical/prehealth advising (<https://undergraduate.northeastern.edu/prehealth/>) are also available. We can be reached by phone at 617.373.5583, by fax at 617.373.8719, or by email at [camdadvising@northeastern.edu](mailto:camdadvising@northeastern.edu).

## Academic Progression Standards

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

## Graduation Clearance Process

Students in the College of Arts, Media and Design are required to meet with their assigned academic advisor 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/undergraduate-students/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. 42). In addition, students pursuing a Bachelor of Arts degree (BA) must fulfill the BA requirements (p. 45).

## School of Architecture

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

**Dan Adams**

Director and Associate Professor

da.adams@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.

### Programs

#### Bachelor of Science (BS)

- Architecture (p. 54)
- Architectural Studies (p. 56)
- Architectural Studies and Design (p. 59)
- Architecture and English (p. 61)
- Architecture and Graphic and Information Design (p. 63)
- Civil Engineering and Architectural Studies, BSCE (p. 64)
- Environmental Engineering and Landscape Architecture, BSEnvE (p. 68)
- Environmental Science and Landscape Architecture (p. 71)

#### Bachelor of Landscape Architecture (BLA)

- Landscape Architecture (p. 58)

### Minors

- Architectural and Urban History (p. 73)
- Architectural Science and Systems (p. 73)
- Urban Landscape Studies (p. 73)

## Architecture, BS

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

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

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

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

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



## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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

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

## Architecture Major Requirements

Code	Title	Hours
<b>SEMESTER 1</b>		
ARCH 1000	Architecture at Northeastern	1
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
<b>SEMESTER 2</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
Architecture History Elective 1		4
Choose any course in the range of ARCH 2300 to ARCH 2399		
<b>SEMESTER 3</b>		
ARCH 2130	Site, Space, and Program	6
ARCH 2240	Architectonic Systems	4
Architecture History Elective 2		4
Choose any course in the range of ARCH 2300 to ARCH 2399		
<b>SEMESTER 4</b>		
ARCH 2140	Urban Institutions	6
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
ARCH 3210 and ARCH 3211	Environmental Systems and Recitation for ARCH 3210	4
ARCH 3450	Advanced Architectural Communication <sup>1</sup>	4
<b>SEMESTER 5</b>		
Abroad:		
ARCH 3155	Studio Abroad	4.8
ARCH 3361	Architecture and Urbanism Abroad	3.2
ARCH 3363	Field Study Topics Abroad	1.6
ARCH 3363	Field Study Topics Abroad	1.6
ARCH 3440	Workshop Topics Abroad	1.6
<b>SEMESTER 6</b>		

ARCH 3170	Architecture, Infrastructure, and the City	6
ARCH 5230 and ARCH 5231	Structural Systems and Recitation for ARCH 5230	4
<b>SEMESTER 7</b>		
ARCH 3370	Advanced Topics in Architectural History	4
ARCH 5115	Option Studio	6
ARCH 5310	Design Tactics and Operations	4
<b>SEMESTER 8</b>		
ARCH 5120	Comprehensive Design Studio	6
ARCH 5220	Integrated Building Systems	4

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

## Supporting Courses

Code	Title	Hours
<b>SEMESTER 1</b>		
ENGW 1111	First-Year Writing	4
MATH 1241	Calculus 1	4
<b>SEMESTER 2</b>		
PHYS 1141	General Physics	4
EEAM 2000	Professional Development for Co-op	1
<b>SEMESTER 6</b>		
ENGW 3314	Advanced Writing in the Arts, Media, and Design	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Cooperative Education

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

COOP 3945	Co-op Work Experience
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## Important Note

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

## Major GPA Requirement

Minimum 2.500 GPA required

## Architecture Major Credit Requirement

Complete 96 semester hours in the major.

## Program Requirement

142 total semester hours required

## Plan of Study

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

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1000	1	ARCH 1110	4	Vacation	0	Vacation	0
ARCH 1310 and ARCH 1311	4	ARCH 1120	6				
ENGW 1111	4	EEAM 2000	1				
MATH 1241	4	PHYS 1141	4				



56 Architectural Studies, BS

Elective	4	Architecture History Elective (1 of 2)	4				
		17	19		0		0

**Year 2**

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

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ARCH 3155	4.8	Vacation		Vacation	
		ARCH 3361	3.2				
		ARCH 3363	1.6				
		ARCH 3363	1.6				
		ARCH 3440	1.6				
		Humanities elective	1.6				
		Language elective	1.6				
		15.999999999999998	0		0		0

**Year 4**

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

**Year 5**

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

Total Hours: 142

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

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1000	1	ARCH 1110	4	Vacation	0	Vacation	0
ARCH 1310 and ARCH 1311	4	ARCH 1120	6				

ENGW 1111	4	PHYS 1141	4
MATH 1241	4	EEAM 2000	1
Elective	4	Architecture History Elective (1 of 2)	4
		17	19
		0	

**Year 2**

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

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 3155	4.8	Co-op	0	Co-op	0	Vacation	0
ARCH 3361	3.2						
ARCH 3362	1.6						
ARCH 3363	1.6						
ARCH 3363	1.6						
ARCH 3440	1.6						
Language elective	1.6						
		15.999999999999998	0		0		0

**Year 4**

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

**Year 5**

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

Total Hours: 142

**Architectural Studies, BS**

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

The Bachelor of Science in Architectural Studies teaches students the rigorous design methods of architecture while also offering a

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

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

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

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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

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

## Architectural Studies Major Requirements

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

Choose any course in the range of ARCH 2300 to ARCH 2399. 4

<b>Capstone</b>		
ARCH 4960	Architectural Studies Capstone	4

## Major Electives

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

Code	Title	Hours
Complete six of the following elective courses. Please note: At least four courses must be taken in the School of Architecture. At least two must be above the 2000 level.		24

Any ARCH or LARC course		
<i>Real Estate</i>		
ENTR 2206	Global Social Enterprise	
ENTR 2301	Innovation!	
ENTR 2303	Marketing Strategies for Startups	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 4501	Advanced Studies in Entrepreneurial Startups	
MKTG 2209	Introduction to Marketing	
<i>Sustainability</i>		
ENVR 3200	Water Resources	
CIVE 1200	How Cities Work: Experiencing Urban Infrastructure	
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
SBSY 5100	Sustainable Design and Technologies in Construction	
SBSY 5200	Sustainable Engineering Systems for Buildings	
PHIL 1180	Environmental Ethics	
<i>History, Theory, and Culture</i>		
ARTH 1100	Interactive Media and Society	
ARTH 2215	History of Graphic Design	
ARTH 5200	Issues in Contemporary Art	
ARTH 5400	Contemporary Visual Culture	
ARTH 5902	Special Topics in Art and Design History	
ARTG 5110	Information Design History	

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

## Optional Preparation for Two-Year Master of Architecture

Code	Title	Hours
If students wish to be eligible for the two-year Master of Architecture program at Northeastern, they should take the four courses listed here. ARCH 2240 and 5230 may count as electives toward the major:		
MATH 1241	Calculus 1	
PHYS 1141	General Physics	
ARCH 2240	Architectonic Systems	
ARCH 5230	Structural Systems	

## Architectural Studies Major Credit Requirement

Complete 72 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1000	1	ARCH 1110	4	Elective	4	Vacation	
ENGW 1111	4	ARCH 1120	6	Elective	4		
ARCH 1310	4	EEAM 2000	1				
Elective	4	Architecture History Elective (1 of 2)	4				
Elective	4	Elective	4				
	17		19		8		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Optional Summer Co-op	Optional Summer Co-op		
ARCH 2330 and ARCH 2331	4	ARCH 2140	6				
ARCH 2260	4	ENGW 3314	4				
Architecture History Elective (2 of 2)	4	Elective	4				
	18		18		0		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Semester in Segovia (or Boston)		Co-op	0	Co-op	0	Vacation	
ARCH 3155 or 3170	3.2						
ARCH 3361 (or Elective in Boston)	3.2						
ARCH 3362 (or Elective in Boston)	3.2						
ARCH 3363 (or Elective in Boston)	1.6						
ARCH 3363 (or Elective in Boston)	1.6						
ARCH 3440	1.6						
Language elective	1.6						
	16		0		0		0

#### 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/>)

Northeastern University offers a Bachelor of Landscape Architecture. This new major reflects a growing public interest in making our cities more sustainable and in bringing the insights of landscape architects to join those of urban designers and architects. This hybrid field has deep roots in design, ecology, planning, and aesthetics. In the past 15 years, it has come to play an evermore important role in the design of new places, as well as the retrofitting of our older, postindustrial landscapes. An inherently interdisciplinary program, urban landscape will involve collaborations with other academic units on campus.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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

NUpath requirement Ethical Reasoning (ER) must be met through general electives.

### Landscape Architecture Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ARCH 1000	Architecture at Northeastern	1
<b>Calculus</b>		
MATH 1241	Calculus 1	4
<b>Environmental Geology</b>		
ENVR 1112	Environmental Geology	4
<b>Foundation Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
<b>History/Theory Courses</b>		
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4

LARC 2330	Cities, Landscape, and Modern Culture	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 5310	Urban Landscape Seminar	4

**Technology/Science Courses**

ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2430	Plants, People, and Landscape Change	4
LARC 2240	Sustainable Site Construction and Detailing	4

LARC 5210	Landscape Ecology	4
LARC 5220	Sustainable Landscape Practices	4
LARC 5420	Professional Practice in Landscape Architecture	4

LARC 2130	Sustainable Urban Site Design	6
LARC 2140	Designed Urban Ecologies	6
LARC 2440	Planting Design	4
LARC 3170	Landscape Planning and Urbanism Studio	6
LARC 5110	Advanced Design for Urban Environments Studio	6
LARC 5120	Comprehensive Design Studio	6

**Design**

LARC 2130	Sustainable Urban Site Design	6
LARC 2140	Designed Urban Ecologies	6
LARC 2440	Planting Design	4
LARC 3170	Landscape Planning and Urbanism Studio	6
LARC 5110	Advanced Design for Urban Environments Studio	6
LARC 5120	Comprehensive Design Studio	6

LARC 5110	Advanced Design for Urban Environments Studio	6
LARC 5120	Comprehensive Design Studio	6

**Professional Development**

EEAM 2000	Professional Development for Co-op	1
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**Cooperative Education**

Urban landscape majors are required to complete one six-month co-op. 0

COOP 3945	Co-op Work Experience	
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**Major GPA Requirement**

Minimum 2.500 GPA required

**Major Credit Requirement**

Complete 98 semester hours for the major.

**Program Requirement**

142 total semester hours required

**Plan of Study**

**Four Years, One Co-op in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1000	1	ARCH 1110	4	Elective	4	Vacation	0
ARCH 1310 and ARCH 1311	4	ARCH 1120	6	Elective	4		
MATH 1241	4	ENGV 1111	4				
ENVR 1112	4	EEAM 2000	1				
Elective	4	Elective	4				
		17		19		8	
						0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LARC 2130	6	LARC 2140	6	Optional Summer Co-op		Optional Summer Co-op	
LARC 2430	4	LARC 2240	4				
LARC 2330	4	LARC 2440	4				
LARC 2230	4	LARC 2340	4				
		18		18		0	
						0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LARC 3170	6	Co-op		Co-op 1		Elective	4
ENGW 3314	4					Elective	4
LARC 5210	4						
ENVR 3300 and ENVR 3301	5						
		19		0		0	
						8	

**Year 4**

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: 143

**Architectural Studies and Design, BS**

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

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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

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

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

**Architectural Studies Courses**

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

**Design Requirements**

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition	4
<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optinal ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional 2224)	
<b>Design Required</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

<b>Design Elective</b>		
Complete any one ARTG design elective course, as long as prerequisites have been met.		4
<b>Art + Design History Elective</b>		
Complete any one art history course within the ARTH subject code.		4
<b>Art + Design Elective</b>		
Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met.		4
<b>Degree Capstone Project</b>		
ARTG 4550	Design Degree Project 1	4

**Design Option**

Code	Title	Hours
Complete one of the following options:		8
<b>Interaction Design Option</b>		
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	
<b>Graphic and Information Design Option</b>		
ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	
<b>Experience Design Option</b>		
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Integrative Requirement**

Code	Title	Hours
ARTG 4550	Design Degree Project 1	

**Program Requirement**

132 total semester hours required

**Plan of Study**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Elective	4	Vacation	0
ARCH 1310 and ARCH 1311	4	ARCH 1120	6	Elective	4		
ARTF 1122 (with optional ARTF 1123)	4	Architecture history elective	4				
ARTG 1250	4	Art + Design fundamentals elective	4				
ENGW 1111	4						
		17		18		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Elective	4	Co-op	0



ARCH 2260	4	ARCH 3450	4	Elective	4
ARTG 2250 (with optional ARTG 2251)	4	ARTG 3350	4		
Architecture elective	4	Design option 1	4		
		EEAM 2000	1		
		18	17	8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Architecture elective	4	Elective	4	Co-op	0
ENGW 3314 or 3315 (online)	4	Art + Design history elective	4	Elective	4		
		ARTG 3451	4				
		Design option 2	4				
		4	16	8	0		

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	Architecture elective	4
Elective (online)	4	ARTG 4550	4
		Art + Design elective	4
		Design elective	4
		4	16

Total Hours: 134

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Vacation	0	Vacation	0
ARTF 1122 (with optional ARTF 1123)	4	ARCH 1120	6				
ARTG 1250	4	Architecture history Elective	4				
ARCH 1310 and ARCH 1311	4	Art + Design fundamentals elective	4				
ENGW 1111	4						
		17	18	0	0		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Vacation	0	Vacation	0

ARTG 2250 (with optional ARTG 2251)	4	ARCH 3450	4
Art + Design history elective	4	Design option 1	4
ARCH 2260	4	Design elective	4
		18	16
		0	0

**Year 3**

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

**Year 4**

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

**Year 5**

Fall	Hours	Spring	Hours
Art + Design elective	4	ARTG 4550	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 134

**Architecture and English, BS**

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

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

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

## Architecture Requirements

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310	Buildings and Cities, A Global History	4
ARCH 1320	Architecture and Global Cultures, 1400 to Present	4
ARCH 1450	Understanding Design	4
ARCH 2130	Site, Space, and Program	6
ARCH 2240	Architectonic Systems	4
ARCH 2330	Architecture and the City in the Nineteenth Century	4
<b>Electives</b>		
Complete two of the following courses:		8
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
ARCH 5310	Design Tactics and Operations	

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

### Theories and Methods

Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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
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**Integrative Requirement**

Code	Title	Hours
ARCH 2330	Architecture and the City in the Nineteenth Century	4
or ARCH 2340	Modern Architecture	
ENGL 3375	Writing Boston	4

**Program Requirement**

128 total semester hours required

**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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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

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

**Architecture Requirements**

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1310	Buildings and Cities, A Global History	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 and the City in the Nineteenth Century	4
ARCH 2340	Modern Architecture	4
<b>Electives</b>		
Complete two of the following courses:		8
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
ARCH 5310	Design Tactics and Operations	

## Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Electives</b>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (with optional ARTF 1124)	
ARTF 2223	Experience and Interaction (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
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						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Vacation	0	Vacation
					0	

ARTG 1250	4	ARCH 1120	6
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2220 (with optional ARTF 2221)	4
ENGW 1111	4	ARCH 1320	4
ARCH 1310	4		

17 18 0 0

### Year 2

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

### Year 3

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

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### Year 4

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

### Year 5

Fall	Hours	Spring	Hours
ARTG 4550	4	ARTG 4551	4
Art and design elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 134

## Civil Engineering and Architectural Studies, BSCE

Civil engineering and architecture are two important disciplines that deal with the process of creating the built environment to satisfy societal needs. Both professions have critical functions that are essential in the development of society in terms of planning cities and designing more resilient infrastructure and rely on one another to accomplish it. The combination of these two professions creates great synergy as architects

focus more on the functional and human aspects of development, while civil engineers concentrate on the structural elements of the design, ensuring durable structures that perform under normal and extreme loads.

Students successfully completing the program receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of architectural topics and design experiences.

Students also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

## Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4
CIVE 2324 or CIVE 3425	Concrete Structure Design Steel Structure Design	4
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Civil Engineering Project Elective</b>		
Complete one of the following:		4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	
<b>Senior Design Project</b>		
CIVE 4767	Senior Design Project—Structural	5

## Civil Engineering Technical Electives

Complete two of the following:		7-8
CIVE 2324	Concrete Structure Design	
CIVE 3425	Steel Structure Design	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4567	Planning and Policy for Sustainable Urban Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4778	Climate Adaptation and Policy Abroad	
CIVE 4780	Timber and Masonry Structures: Technology and Design Abroad	
CIVE 4781	Introduction to Preservation and Restoration of Historic Buildings, Technology, and Policies Abroad	
CIVE 5221	Construction Project Control and Organization	
CIVE 5231	Alternative Project Delivery Systems in Construction	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5373	Transportation Systems: Analysis and Planning	
CIVE 5376	Traffic Engineering and Sustainable Urban Street Design	
CIVE 5520	Structural Systems	
CIVE 5522	Structural Systems Modeling	
CIVE 5525	Prestressed Concrete Design	
CIVE 5536	Hydrologic and Hydraulic Design	
CIVE 5699	Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)	
SBSY 5100	Sustainable Design and Technologies in Construction	
SBSY 5200	Sustainable Engineering Systems for Buildings	
SBSY 5250	Building Performance Simulation	



SBSY 5300 Information Systems for Integrated Project Delivery

**Supplemental Credit**

1 semester hour from the following course counts toward the engineering requirement: 1

CIVE 3464 Probability and Engineering Economy for Civil Engineering

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501 Cornerstone of Engineering 1

3 semester hours from the following course count toward the engineering requirement: 3

GE 1502 Cornerstone of Engineering 2

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
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**Required Mathematics/Science**

Complete one of the following: 4

CHEM 1151 General Chemistry for Engineers and CHEM 1153 and Recitation for CHEM 1151

CHEM 1211 General Chemistry 1 and CHEM 1212 and CHEM 1213 and Recitation for CHEM 1211

CHEM 1214 General Chemistry 2 and CHEM 1215 and CHEM 1216 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 Physics for Engineering 1 and PHYS 1152 and PHYS 1153 and Interactive Learning Seminar for PHYS 1151

PHYS 1161 Physics 1 and PHYS 1162 and PHYS 1163 and Recitation for PHYS 1161

**Science Elective**

Complete one of the following: 4-5

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

BIOL 1141 Microbes and Society

BIOL 1143 Biology and Society

CHEM 2311 Organic Chemistry 1 and CHEM 2312 and CHEM 2319 and Recitation for CHEM 2311

CHEM 3410 Environmental Geochemistry

EEMB 1101 Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101

EEMB 1450 Introduction to Marine Biology

EEMB 2302 Ecology and EEMB 2303 and Lab for EEMB 2302

ENVR 1120 Oceans and Coasts

ENVR 1200 Dynamic Earth

ENVR 2200 Earth's Changing Cycles

ENVR 3125 Global Oceanic Change

ENVR 3200 Water Resources

ENVR 3600 Oceanography

ENVR 5201 Geologic Field Seminar

ENVR 5350 Sustainable Energy and Climate Solutions

PHYS 1111 Astronomy

PHYS 1125 Introduction to Network Science: From the Human Cell to Facebook

PHYS 1155 Physics for Engineering 2 and PHYS 1156 and Lab for PHYS 1155

PHYS 4623 Medical Physics

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464 Probability and Engineering Economy for Civil Engineering

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

**Professional Development**

Code	Title	Hours
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**Professional Development**

GE 1000 Introduction to the Study of Engineering 1

ENCP 2000 Introduction to Engineering Co-op Education 1

ENCP 3000 Professional Issues in Engineering 1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2

**Architecture Requirements**

Code	Title	Hours
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ARCH 1110 Fundamental Architectural Representation 4

ARCH 1120 Fundamental Architectural Design 6

ARCH 1310 Buildings and Cities, A Global History and ARCH 1311 and Recitation for ARCH 1310 4

ARCH 2130 Site, Space, and Program 6

ARCH 2140 Urban Institutions 6

ARCH 2340 Modern Architecture and ARCH 2341 and Recitation for ARCH 2340 4

ARCH 3210 Environmental Systems and ARCH 3211 and Recitation for ARCH 3210 4

**Architectural Electives**

Complete two of the following: 8

ARCH 3370	Advanced Topics in Architectural History
ARCH 3351	Architecture Topics Abroad: Theory
ARCH 3352	Architecture Topics Abroad: Drawing
ARCH 3450	Advanced Architectural Communication
ARCH 4850	Urban and Architectural History Abroad
ARCH 5115	Option Studio
ARCH 5220	Integrated Building Systems
ARCH 5310	Design Tactics and Operations

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4

**Integrative Courses**

Code	Title	Hours
CIVE 4767	Senior Design Project—Structural	

**ENGINEERING GPA REQUIREMENT**

Minimum 2.000 GPA required in all Engineering courses

**ARCHITECTURE GPA REQUIREMENT**

Minimum 2.000 GPA required in all Architecture courses

**Program Requirements**

144 total semester hours required

Note:

- Students who wish to be considered for the two-year Master of Architecture Program at Northeastern **SHOULD** take ARCH 3450 as an elective and **SHOULD NOT** take ARCH 5115 or ARCH 5220 as architectural electives.
- Students who wish to be considered for the two-year Master of Architecture Program at Northeastern **MUST** have satisfied the Structural Systems (ARCH 5230) requirement. This requirement is achieved in this combined major by taking the following three courses, as follows:
  - CIVE 2221 Statics and Solid Mechanics (including recitation CIVE 2222)
  - CIVE 2320 Structural Analysis (including recitation CIVE 2321)
  - And at least one design course from the following:
    - CIVE 2324 Concrete Structure Design
    - CIVE 3425 Steel Structure Design

**Plan of Study**

**Four Years, 1 Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	ARCH 1120 (ND, EI)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		

GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						

	17		18		9		0
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**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1310 (IC, DD)	4	ARCH 2340 (IC, SI, WI)	4	CIVE 2324	4	Co-op	
ARCH 1311	0	ARCH 2341	0	GE 3300	4		
ARCH 2130	6	CIVE 2260	4				
CIVE 2221	4	CIVE 2261 (AD)	1				
CIVE 2222	0	CIVE 2320	4				
MATH 2341	4	CIVE 2321	0				
		CIVE 2334	4				
		ENCP 2000	1				

	18		18		8		0
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**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ARCH 2140	6	ENGW 3302 (WD)	4	Vacation	
		CIVE 2331	4				
		CIVE 2340	4				
		CIVE 2341	1				
		Civil Tech. Elective	4				

	0		19		4		0
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**Year 4**

Fall	Hours	Spring	Hours
CIVE 3464	4	ARCH 3210 (ND, AD)	4
ENCP 3000	1	ARCH 3211	0
Architectural Elective	4	CIVE 4767 (EI, WI, CE)	5
Civil Project Elective (WI)	4	Architectural Elective	4
Civil Tech. Elective	4	Science Elective	4

	17		17
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Total Hours: 145

**Five Years, 3 Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	ARCH 1120 (ND, EI)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						

MATH 1341 (FQ)	4					
	17	18	9	0		
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
ARCH 1310 (IC, DD)	4	CIVE 2260	4	Vacation		Co-op
ARCH 1311	0	CIVE 2261 (AD)	1			
ARCH 2130	6	CIVE 2320	4			
CIVE 2221	4	CIVE 2321	0			
CIVE 2222	0	CIVE 2334	4			
MATH 2341	4	ENCP 2000	1			
		GE 3300	4			
	18	18	0	0		
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		ARCH 2340 (IC, SI, WI)	4	CIVE 2324	4	Co-op
		ARCH 2341	0	Science Elective	4	
		CIVE 2331	4			
		CIVE 2340	4			
		CIVE 2341	1			
		Civil Tech. Elective	4			
	0	17	8	0		
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		ARCH 2140	6	Vacation		Co-op
		ARCH 3210 (ND, AD)	4			ENGW 3302 (to be taken online) (WD)
		ARCH 3211	0			
		CIVE 3464	4			
		ENCP 3000	1			
		Civil Project Elective (WI)	4			
	0	19	0	4		
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op		CIVE 4767 (EI, WI, CE)	5			
		Architectural Elective	4			
		Architectural Elective	4			
		Civil Tech. Elective	4			
	0	17				

Total Hours: 145

## Environmental Engineering and Landscape Architecture, BSEnvE

Environmental engineering and landscape architecture are two important disciplines that deal with the complex interaction between the natural and the built environment. Both professions have critical functions that are essential in the development of society in terms of planning and designing more sustainable cities. The combination of these two professions creates great synergy and seeks to expose engineering students to the conceptual and practical content of landscape planning. Successful graduates from this degree are prepared to imagine and create projects that can be translated into reality providing solutions to address the world's growing challenges by designing clean and sustainable environments and green infrastructure.

Students completing the combined major Bachelor of Science in Environmental Engineering and Landscape Architecture receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of landscape architectural topics and design experiences.

Students will also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

<b>Senior Design Project</b>		
CIVE 4765	Senior Design Project—Environmental	5
<b>Environmental Engineering Technical Electives</b>		
Complete two of the following:		7-8
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4778	Climate Adaptation and Policy Abroad	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5536	Hydrologic and Hydraulic Design	

**Supplemental Credit**

1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 2335	Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 3430	Engineering Microbiology and Ecology	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
Complete one of the following:		4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

Complete one of the following: 5

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
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PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
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**Science Elective (Earth)**

Complete one of the following: 4-5

ENVR 1120	Oceans and Coasts	
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ENVR 1200	Dynamic Earth	
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ENVR 2200	Earth's Changing Cycles	
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ENVR 3125	Global Oceanic Change	
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ENVR 3200	Water Resources	
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ENVR 3600	Oceanography	
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ENVR 5201	Geologic Field Seminar	
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**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464	Probability and Engineering Economy for Civil Engineering	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

CIVE 2335	Environmental Engineering Chemistry	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

CIVE 3430	Engineering Microbiology and Ecology	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	
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**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	
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**Landscape Architecture Requirements**

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4

ARCH 1120	Fundamental Architectural Design	6
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2240	Sustainable Site Construction and Detailing	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 2430	Plants, People, and Landscape Change	4
LARC 2440	Planting Design	4
LARC 5420	Professional Practice in Landscape Architecture	4

### Writing Requirements

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4

### Integrative Courses

Code	Title	Hours
CIVE 4765	Senior Design Project—Environmental	5

### Engineering GPA Requirement

Minimum 2.000 GPA required in all major courses

### Landscape Architecture GPA Requirement

Minimum 2.500 GPA required in all major courses

### Program Requirements

143 total semester hours required

### Plan of Study

#### Four Years, 1 Co-op in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	ARCH 1120 (EI, ND)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						
		17			18		
						9	
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2334	4	ARCH 1310 (IC, DD)	4	CIVE 2221	4	Co-op	0
LARC 2230 (ND)	4	ARCH 1311	0	CIVE 2222	0		

LARC 2430 (ND)	4	CIVE 2260 (AD)	4	GE 3300	4		
MATH 2341	4	CIVE 2261 (AD)	1				
		CIVE 2335	4				
		CIVE 3430	4				
		ENCP 2000	1				
		16			18		
						8	
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 2331	4	ENGW 3302 (WD)	4	Vacation	0
		LARC 2240	4	Science Elective (Earth)	4		
		LARC 2340 (IC, SI, WI)	4				
		LARC 2440	4				
		0			16		
						8	
						0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 3435	4	CIVE 4765 (EI, CE, WI)	5				
CIVE 3464	4	CIVE 5300	2				
CIVE 4534 (WI)	3	CIVE 5301	2				
CIVE 4535	1	LARC 5420	4				
ENCP 3000	1	Environmental Tech. Elective	3				
Environmenta Tech. Elective	4						
		17			16		

Total Hours: 143

#### Five Years, 3 Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	ARCH 1120 (EI, ND)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						
		17			18		
						9	
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2334	4	ARCH 1310 (IC, DD)	4	CIVE 2221	4	Co-op	0
LARC 2230 (ND)	4	ARCH 1311	0	CIVE 2222	0		



LARC 2430 (ND)	4	CIVE 2260	4	GE 3300	4		
MATH 2341	4	CIVE 2261 (AD)	1				
		CIVE 2335	4				
		CIVE 3430	4				
		ENCP 2000	1				
	16		18		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 2331	4	ENGW 3302 (WD)	4	Co-op	
		CIVE 3435	4	Science Elective (Earth)	4		
		LARC 2440	4				
		Environmenta Tech. Elective	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 4534 (WI)	3	Vacation		Co-op	
		CIVE 4535	1				
		ENCP 3000	1				
		LARC 2240	4				
		LARC 2340 (IC, SI, WI)	4				
		Environmenta Tech. Elective	3				
	0		16		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		CIVE 3464	4
		CIVE 4765 (EI, CE, WI)	5
		CIVE 5300	2
		CIVE 5301	2
		LARC 5420	4
	0		17

Total Hours: 143

## Environmental Science and Landscape Architecture, BS

The Department of Marine and Environmental Sciences and the program in Landscape Architecture provide an education in basic environmental science and landscape architecture-related disciplines. This combined major provides students an opportunity to obtain the fundamental scientific background and practical training to tackle environmental and landscape-related issues. The program seeks to prepare students for advanced studies or careers in fields of urban planning, urban design, sustainable development, environmental consulting and/or other fields focusing on the interactions among landscapes, the built environment, human societies, and overall climatic impacts.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Environmental Science Requirements

Code	Title	Hours
Environmental Science Required Courses		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
ENVR 3200	Water Resources	4
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
Complete one of the following:		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	

## Environmental Science Electives

Code	Title	Hours
A total of four electives is required; complete at least one, and no more than two, from each of the following categories:		
Geological Sciences		
ENVR 2310	Earth Materials	
ENVR 3410	Environmental Geochemistry	
ENVR 5190	Soil Science	
Human-Coupled Systems		
ENVR 2340	Earth Landforms and Processes	
ENVR 5210	Environmental Planning	
EEMB 3460	Conservation Biology	
Biological Perspectives		
EEMB 4001	Landscape and Restoration Ecology	
ENVR 4505	Wetlands	

## Landscape Architecture Requirements

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
LARC 2130	Sustainable Urban Site Design	6
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2330	Cities, Landscape, and Modern Culture	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 2430	Plants, People, and Landscape Change	4

### Landscape Architecture Electives

Code	Title	Hours
Complete three of the following:		12-14
LARC 2240	Sustainable Site Construction and Detailing	
LARC 2440	Planting Design	
LARC 3170	Landscape Planning and Urbanism Studio	
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
LARC 5210	Landscape Ecology	
LARC 5220	Sustainable Landscape Practices	
LARC 5310	Urban Landscape Seminar	
SUEN 6210	Implementation and Visualization for Urban Environments 1	
SUEN 6220	Implementation and Visualization for Urban Environments 2	

### Capstone/Integrative Course

Code	Title	Hours
Complete one of the following:		4
ENVR 4997	Senior Thesis	
LARC 5120	Comprehensive Design Studio	
LARC 5210	Landscape Ecology	

### Program Requirements

132 total semester hours required

### Plan of Study

#### Four-Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	ARCH 1110	4	Elective	4	Elective	4
ENVR 1101 or 1200	4-5	ARCH 1120	6	Elective	4	Elective	4
LARC 2430	4	EEMB 2302 and EEMB 2303	5				
Elective	4	ENGW 1111	4				
Elective	4	EEAM 2000	1				
17-18		20		8		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LARC 2130	6	LARC 2340	4	Elective	4	Co-op	0
LARC 2230	4	ENVR 3300 and ENVR 3301	5	Elective	4		
LARC 2330	4	LARC elective	4				
ENVR 3200	4	Elective	4				
18		17		8		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENVR elective	4	ENGW 3314	4	Co-op	0
		ENVR elective	4	Elective	4		
		ENVR elective	4				
		LARC elective	4				
0		16		8		0	
Year 4							
Fall	Hours	Spring	Hours				
Co-op	0	ENVR 2515	4				
		Capstone	4				
		ENVR elective	4				
		LARC elective	4				
0		16					

Total Hours: 136-137

#### Five-Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1101 or 1200	4-5	ARCH 1110	4	Vacation	0	Vacation	0
ENVR 1000	1	ARCH 1120	6				
LARC 2430	4	EEMB 2302 and EEMB 2303	5				
Elective	4	ENGW 1111	4				
Elective	4	EEAM 2000	1				
17-18		20		0		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LARC 2130	6	LARC 2340	4	Vacation	0	Vacation	0
LARC 2230	4	LARC elective	4				
LARC 2330	4	Elective	4				
Elective	4	Elective	4				
18		16		0		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 3300 and ENVR 3301	5	Co-op 1	Co-op 1	0	Vacation	0	0
ENVR 3200	4						
ENGW 3314	4						
Elective	4						
17		0		0		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LARC elective	4	Co-op 2		Co-op 2		0 Vacation	0
ENVR 2515	4						
ENVR elective	4						
Elective	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
ENVR elective	4	Capstone	4
ENVR elective	4	ENVR elective	4
Elective	4	LARC elective	4
Elective	4	Elective	4
	16		16

Total Hours: 136-137

**Architectural and Urban History, Minor**

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

The four-course minor introduces students to the study of architectural history, paying particular attention to the relationship between buildings and their larger urban, cultural, economic, and social environments. The minor includes one general survey class that covers a variety of different cultures and geographic contexts over time. Students may then choose from a suite of architectural history courses to fulfill the remaining 12 credits of this minor.

Please note: This minor is not available to students in the BS Architecture or BS Architectural Studies major. BLA Landscape Architecture students may double count at most one course with this minor.

**Minor Requirements**

*Note:* This minor is not available to students in the BS in architecture or BS in architectural studies major. BLA in landscape architecture students may double count at most one course with this minor.

**Required Courses**

Code	Title	Hours
<b>Architectural History Core</b>		
ARCH 1310	Buildings and Cities, A Global History	4
<b>Electives</b>		
Complete three of the following:		12
ARCH 1350	American Architecture	
ARCH 1370	Special Topics in Architectural History	
<i>Any course from the ARCH 2300 series, including:</i>		
ARCH 2310	History of Chinese Architecture	
ARCH 2315	East Asian Architecture: History from a Global Perspective	
ARCH 2320	Modern Chinese Architecture	
ARCH 2330	Architecture and the City in the Nineteenth Century	

ARCH 2335	Architecture and Politics
ARCH 2340	Modern Architecture
ARCH 2345	Contemporary Architecture
ARCH 2350	American Architecture
ARCH 3361	Architecture and Urbanism Abroad
ARCH 3370	Advanced Topics in Architectural History
ARCH 4850	Urban and Architectural History Abroad

**GPA Requirement**

2.000 GPA required in the minor

**Architectural Science and Systems, Minor****Minor Requirements**

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

Only one course can be double counted towards any other Major or Minor.

**Requirements**

Code	Title	Hours
<b>Building Systems Required Course</b>		
ARCH 2260	Introduction to Building Systems	4
<b>Building Systems Core</b>		
Complete two of the following:		8
ARCH 2240	Architectonic Systems	
ARCH 3210	Environmental Systems	
or ARCH 5210	Environmental Systems	
ARCH 5230	Structural Systems	
<b>Elective</b>		
Complete one of the following. The third course from the Building Systems Core section above may be taken as an elective.		4
ARCH 2250	Introduction to Sustainable Design in Architecture	
ARCH 5220	Integrated Building Systems	
GE 3300	Energy Systems: Science, Technology, and Sustainability	
SBSY 5200	Sustainable Engineering Systems for Buildings	

**GPA Requirement**

2.000 GPA required in the minor

**Urban Landscape Studies, Minor**

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

The minor in urban landscape studies has two tracks, one for architecture majors and a second for students from other disciplines. The minor introduces fundamental design and management of sustainable urban environments, as well as an overview of historical and contemporary issues in urban landscape.

## Minor Requirements

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

No more than one course may count toward any other degree or minor

## Required Courses

Code	Title	Hours
<b>Urban Landscape Core 1</b>		
LARC 2340	Cities, Landscape, and Contemporary Culture	4
<b>Urban Landscape Core 2</b>		
Complete two of the following:		8
LARC 2230	Introduction to Sustainable Site Planning and Design	
LARC 2330	Cities, Landscape, and Modern Culture	
LARC 2430	Plants, People, and Landscape Change	

## Elective

Code	Title	Hours
Complete one of the following:		4
AFAM 2549	Public Policy and Black America	
ARCH 1310	Buildings and Cities, A Global History	
ARCH 3352	Architecture Topics Abroad: Drawing	
ARCH 4850	Urban and Architectural History Abroad	
ARTG 4553	Environmental Information Design	
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
ENVR 1200	Dynamic Earth	
ENVR 3200	Water Resources	
LARC 2230	Introduction to Sustainable Site Planning and Design	
LARC 2240	Sustainable Site Construction and Detailing	
LARC 2330	Cities, Landscape, and Modern Culture	
LARC 2430	Plants, People, and Landscape Change	
LARC 2440	Planting Design	
LARC 5210	Landscape Ecology	
POLS 2395	Environmental Politics and Policy	
SOCL 1246	Environment and Society	

## GPA Requirement

2.500 GPA required in the minor

## Art + Design

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

### Edwin Andrews, MFA

Interim Chair

239 Ryder Hall  
617.373.4340

Art makes life meaningful. Design makes life possible. Together they make life wonderful. The work of artists and designers informs and forms cultures, benefits society, and empowers the global marketplace of ideas. The faculty in the Department of Art + Design seeks to prepare students

for a rich and rewarding life making a significant difference in the lives of others. We study the fundamentals of knowing, thinking, making, and doing; you have an opportunity to learn to use ideas and influences, tools and techniques, and principles and processes of art and design. We provide a faculty, format, and facilities for a great experiential education in art and design within a major urban research university. You pursue your curiosity about, intentions toward, and obligations to the evolving world. Summer programs may include Iceland, Ireland, Venice, Rome, Berlin, Budapest, Cuba, Japan, and Ecuador and offer intensive studio experiences to augment your study with travel and creative work in the context of other cultures.

Whether you are studying design, media art, or game design, the Department of Art + Design seeks to cultivate your talents as a source of original ideas and expressions of an inner life, using classical, current, and emerging media. You are inspired and challenged to create powerful new works. You will gain visual literacy and fluency with professional art, design, and game design practices in the context of a liberal arts education. You can be transformed into a creative force, ready to realize your potential and create cultural value and social benefit.

## Art, BA

Northeastern offers a studio-based fine art program that investigates visual studies and various cultures, giving students a way of developing their own creative practice as well as an understanding of the relationship between form and meaning. To achieve this level of consciousness around arts practice, students will strike a balance between studio courses in drawing/painting and digital media with visual studies courses that focus on the historical, theoretical, and critical interpretation of visual art. This exploration of art methods creates a more visually and conceptually astute student through making. Students' education, experience, and training in understanding creative practices takes full advantage of the remarkable scope of the College of Arts, Media and Design. Some courses in this program are offered in locations abroad and may include Iceland, Ireland, Japan, and Galapagos, where students have an intensive and immersive creative experience during five-week summer sessions. Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The Visual Studies Concentration examines both the production and public reception of art across regions, contexts, periods, and media, foregrounding arts' status as both a material artifact and social communication. Courses reflect the active research profiles and professional experience of its distinguished faculty who all prioritize accessibility, collaboration, and cutting-edge research. Lectures and seminars take advantage of Northeastern's proximity to area museums and cultural centers, including the Institute of Contemporary Art and the Museum of Fine Arts, as well as campus facilities and initiatives like Gallery 360 and the Center for the Arts. Other dynamic resources include Northeastern's own renowned archives offering tangible case studies to consider how criticism coalesces into the historical record. Visual studies introduces students to a broad range of creative careers endemic to the fields of design, publishing, curation, conservation, and scholarship.

The Department of Art + Design uses communal studio space to train students in painting and drawing processes. The department also hosts a fabrication lab that supports a wide range of material-based research for the CAMD community. Beyond the foundation-level courses required for all students, the makerspace provides the resources for prototyping

processes ranging from model-making, woodworking, CAD, as well as digital fabrication through laser cutting, 3D scanning, and 3D printing.

The **Bachelor of Arts in Art** is offered with a concentration in visual studies or without a concentration.

## Design, BFA

Design is the practice-based discipline that poses important questions about—and provides significant answers to—how we live. Designers are needed when we don't know what is needed as well as when we think we do. Designers propose alternative futures and create new choices using principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action. Concentrations in design practices are graphic and information design, interaction design, and experience design.

Graphic designers make messages and meaning using visual form and the integration of text and image. Their work often has a persuasive intent and uses rules of visual composition, form, and pattern to enable storytelling or to create attention and an ambiance for consideration. Information designers visualize concepts and data to enhance human understanding of complex and vital knowledge. Their work has an enlightening or instructive intent and is based on factual content.

Interaction designers focus on the creation of navigable interfaces and systems that allow audiences to take an active role to achieve meaningful goals. Their work connects people to people and people to information and environments.

Experience designers take a holistic and integrative approach that focuses on the quality of the human experience in concrete situations. They employ research, analysis, creativity, and technology as tools to understand human goals, needs, and desires. Their work examines and improves contexts, systems, services, or events.

Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins or Design Management at London College of Communications (<https://www.arts.ac.uk/subjects/business-and-management-and-science/undergraduate/ba-hons-design-management-lcc/>) campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

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

## Game Design, BFA

The BFA in Game Design seeks to give students the skills to communicate ideas and emotions through interactive media. The focus of the BFA degree is to explore games as an aesthetic and expressive form through critical analysis and creative, reflective practice. To reflect emerging trends in the video and analog game industries, including broader platforms, audiences, and distribution channels, students will be oriented toward developing games and playful media in an independent creative context. Curriculum is geared to cultivating students' unique creative voices through courses applying theoretical analysis to game-development practices across a wide range of media. Students are exposed to a wide variety of genres and contexts, as well as different ways of thinking about games content, platforms, and asset production.

## Media Arts, BFA

The continuing revolution in digital computing and global communications has produced a rapidly evolving field for artists

who create experiences of image and form with computer screens, intelligent devices, and new materials. Artists also invent tools for exploring, creating, and distributing their ideas and works. Media arts concentrations of animation, photography, and video arts are offered with variations yet to be invented.

Courses in imaginative and narrative arts, required for professional work in documentary films, game art, visualization, visual effects, motion graphics, interactive art, illustration, and short animated films are offered at Northeastern. The curriculum in our intensive studio program provides knowledge, experience, and techniques of media arts informed by theory, experimentation, and critique. Extensive digital imaging and interactive media editing production facilities afford one the opportunity to become highly proficient in the current skills and emerging practices necessary for remarkable work. The media arts are evolving and expanding into culture in daily life and global experience. The revolutions in immersive media, 3D printing, embedded devices, and robotics are changing the landscape in which the media artist will operate. This degree is designed to prepare students to meet the challenges of continuous change with adaptive ingenuity. Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The animation concentration provides a comprehensive exploration of the entire production pipeline for a variety of animated content including films, visual effects, broadcast, visualization, games, and spatial media. With a focus on developing robust, conceptual, narrative, and technical software skills, this rigorous studio program explores the power and potential of effective visual communication through 2D and 3D motion design. The animation concentration provides ample opportunities to explore and collaborate with related creative disciplines (VR/AR/XR, game design, interactive, video, etc.), making this a truly unique learning experience. Throughout their education, students will work to develop a professional-level portfolio, the centerpiece of which will be a one-year capstone project, demonstrating mastery in their specific area of focus.

The photography concentration encourages experimental and self-disciplined engagement with photographic processes in order to understand how materials function, both as a physical component of photographic work as well as a signifier of meaning. Concept and process are in constant dialogue, and we believe learning through doing cultivates individual vision and working methods. Each student's creative approach establishes a vital platform for discovery. In addition, theory and conceptual development provide students with necessary analytical tools for understanding and analyzing visual and technological trends in current and future photographic practices.

Young professionals today must meet challenges—as well as enjoy opportunities—to be more creative, adaptive, and innovative as active practitioners within our contemporary visual culture and evolving technological environment. Our responsibility as liberal arts educators is to expand the skills and vision of each student in light of their individual and professional goals. At a time when initiative, creativity, and innovation are leading principles for social and economic progress, it is important to stress the ways in which their artistic and creative endeavors can make a rewarding and meaningful contribution.

Northeastern photography program students find themselves in the center of Boston's creative hub, across from the Museum of Fine Arts. Northeastern's own Center for the Arts directs interdisciplinary research and presents exhibitions and innovative programs. The newly renovated Media Hub offers state-of-the-art equipment rentals and digital printing resources. Photography students have access to two large



computer labs and an alternative photographic processes darkroom with film processing and analog printing capabilities.

Our foundation photography courses are small studio and lab classes, leading to intermediate and advanced studios and seminars with an emphasis on personal vision developed through lectures, critiques, individual meetings, and research. In addition, guest artists are invited to participate and offer insights.

The video arts concentration is a multidisciplinary field focused on creative video expression and messaging that weaves together art and design foundations; art and design history; video production; cinematic language (including documentary, narrative, and experimental strategies); collaborative frameworks; and theories of social and cultural change. The scope of the video arts curriculum is a broader and more diverse tapestry than traditional video art, and it reflects the dynamic evolution of video in multiple contexts. The video arts concentration enables students to explore traditional, alternative, and other artistic means of video art production in a variety of creative and technical contexts. The focus on a multiplicity of artistic formats—hence, the choice of the title video arts—underscores our attention to the training of students who are interested in learning how to experiment with new technical, narrative, and aesthetic practices and incorporate these options into the traditional medium of video art.

The **Bachelor of Fine Arts in Media Arts** is offered without a concentration or with the following concentration options: animation, photography, or video arts.

### Studio Art, BFA

Our BFA in Studio Art is offered in partnership with the School of the Museum of Fine Arts at Tufts University (SMFA at Tufts) (<https://smfa.tufts.edu/>) across Huntington Avenue from our campus. In this major, your studio art classes are taken at the SMFA at Tufts, which allows students to explore a wide range of artistic media, including ceramics, drawing, film, metalsmithing, painting, performance, printing, sculpture, and sound, in their extensive studio environments. Our students complete Art + Design history courses in our department and they have access to all the elective courses, co-op and study-abroad programs, student resources, and activities that Northeastern students experience. Additionally, students may opt to enroll in select courses at the University of Arts London (UAL), Fine Art at Central Saint Martins campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

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

### Admission Requirements for Art + Design

There are specific admissions criteria for students entering majors in the Department of Art + Design. See Admission Requirements for the College of Arts, Media and Design (p. ).

### Academic Progression Standards

Same as college standards.

### Programs

#### Bachelor of Arts (BA)

- Art (p. 76)
- Communication Studies and Graphic and Information Design (p. 103)
- English and Graphic and Information Design (p. 105)
- Media and Screen Studies and Media Arts (p. 117)

- Media Arts and Communication Studies (p. 118)
- Theatre and Interaction Design (p. 120)

#### Bachelor of Fine Arts (BFA)

- Design (p. 79)
- Game Design (p. 82)
- Media Arts (p. 83)
- Studio Art (p. 88)
- Game Art and Animation (p. 108)

#### Bachelor of Science (BS)

- Architectural Studies and Design (p. 59)
- Architecture and Graphic and Information Design (p. 63)
- Behavioral Neuroscience and Design (p. 91)
- Business Administration and Design (p. 94)
- Computer Science and Design (p. 96)
- Computer Science and Game Development (p. 99)
- Computer Science and Media Arts (p. 100)
- Game Design and Music with Concentration in Music Technology (p. 112)
- Graphic and Information Design and Mathematics (p. 113)
- Journalism and Interaction Design (p. 114)
- Theatre and Interaction Design (p. 121)

#### Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering and Design (p. 123)

#### Minors

- Animation (p. 126)
- Art (p. 126)
- Art History (p. 127)
- Creative Fabrication (p. 128)
- Experience Design (p. 128)
- Game Art (p. 129)
- Game Design (p. 129)
- Graphic and Information Design (p. 130)
- Immersive Media (p. 130)
- Interaction Design (p. 131)
- Photography (p. 131)
- Photojournalism (p. 132)
- Video Arts (p. 132)

### Art, BA

The Bachelor of Arts is a studio-based fine art program that offers an investigation into visual studies and various cultures, giving students a way of developing their own vision of creative practice as well as an understanding of the relationship between form and meaning. To achieve this level of consciousness around arts practice, students are offered a balance between studio courses in drawing/painting and digital media with visual studies courses that focus on the historical, theoretical, and critical interpretation of visual art. This exploration of art methods creates a more visually and conceptually astute student through making. Students' education, experience, and training in understanding creative practices takes full advantage of the remarkable scope of the College of Arts, Media and Design. Some courses in this program are offered in locations abroad including Iceland,

Ireland, Japan, and Galapagos, where students have an intensive and immersive creative experience during five-week summer sessions. Additionally, students may opt to enroll in select courses at the University of the Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&/#38;utm\\_medium=profile&](https://www.arts.ac.uk/?utm_source=qs&/#38;utm_medium=profile&)) (UAL), fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>) campus. This unique opportunity allows students to spend a semester in London while discovering a new culture.

The visual studies concentration examines both the production and public reception of art across regions, contexts, periods, and media, foregrounding arts' status as both a material artifact and an act of social communication. Courses reflect the active research profiles and professional experience of its distinguished faculty who all prioritize accessibility, collaboration, and cutting-edge research. Lectures and seminars take advantage of Northeastern's proximity to area museums and cultural centers—including the Institute of Contemporary Art and the Museum of Fine Arts—and campus facilities and initiatives like Gallery 360 and the Center for the Arts. Other dynamic resources include Northeastern's own renowned archives offering tangible case studies to consider how criticism coalesces into the historical record. Visual studies introduces students to a broad range of creative careers endemic to the fields of design, publishing, curation, conservation, and scholarship.

The Department of Art + Design uses communal studio space to train students in painting and drawing processes. The department also hosts a fabrication lab that supports a wide range of material-based research for the CAMD community. Beyond the foundation-level courses required for all students, the makerspace provides the resources for prototyping processes ranging from model making, woodworking, CAD, as well as digital fabrication through laser cutting, 3D scanning, and 3D printing.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through general electives.

## Art and Design Core

Code	Title	Hours
<b>Introduction</b>		
ARTF 1000	Art and Design at Northeastern	1

## Fundamentals

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

## Drawing Elective

ARTF 1120 or ARTF 1121	Observational Drawing or Conceptual Drawing	4
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## Art History Required

ARTH 1110	Global Art and Design History: Ancient to Medieval	4
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2210	Modern Art and Design History	4
ARTH 2211	Contemporary Art and Design History	4

## Capstone

ARTD 4530	Media Arts Degree Project 1	4
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## Concentration or Electives

Complete the following concentration or the electives linked below:

- Concentration in Visual Studies (p. 77)
- Electives (p. 78)

## Major GPA Requirement

A major GPA of 2.500 is required.

## Program Requirement

129 total semester hours required

## Concentration in Visual Studies

Code	Title	Hours
<b>Art and Design History Electives</b>		
Courses in architectural history and media and screen studies may also be used upon approval by the chair of the Department of Art + Design.		
Complete five of the following courses as long as prerequisites have been met. At least one must be at least at the 4000 level:		20
ARTE 2501	Art and Design Abroad: History	
ARTH 1100	Interactive Media and Society	
ARTH 2212	Survey of the Still and Moving Image	
ARTH 2213	Nineteenth-Century Art	
ARTH 2215	History of Graphic Design	
ARTH 5100	Contemporary Art Theory and Criticism	
ARTH 5200	Issues in Contemporary Art	
ARTH 5400	Contemporary Visual Culture	
ARTH 5902	Special Topics in Art and Design History	

## Electives

Code	Title	Hours
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### Arts, Media and Design Electives

Complete any five courses from the following lists as long as prerequisites have been met. At least one must be at least at the 4000 level.

#### Art + Design

ARTD 2100	Narrative Basics	
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTD 3460	Photography: Concept + Process	
ARTD 3470	Animation 1	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 3480	Video: Sound and Image	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	
ARTD 4577	Digital Sculpture and Model Making	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTD 5582	Collaborative Video and Community Engagement	
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTG 1250	Design Process Context and Systems	
ARTG 2250	Typography 1 (with optional ARTG 2251)	
ARTG 2252	Graphic Design 1	
ARTH 1100	Interactive Media and Society	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2213	Nineteenth-Century Art	
ARTH 5100	Contemporary Art Theory and Criticism	
ARTH 5200	Issues in Contemporary Art	
ARTH 5400	Contemporary Visual Culture	
ARTS 2330	Sculpture Basics	
ARTS 2341	Figure Drawing	
ARTS 2340	Painting Basics	
ARTS 3449	Drawing in Mixed Media	

#### Architecture

ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	
ARCH 1320 and ARCH 1321	Architecture and Global Cultures, 1400 to Present and Recitation for ARCH 1320	
ARCH 1350	American Architecture	

ARCH 1450	Understanding Design	
ARCH 2330	Architecture and the City in the Nineteenth Century	
ARCH 2340	Modern Architecture	
<i>Communication Studies</i>		
COMM 1101	Introduction to Communication Studies	
<i>Game Design</i>		
GAME 1110	Games and Society	
<i>Journalism</i>		
JRNL 1150	Understanding Today's News	
<i>Media and Screen Studies</i>		
MSCR 1220	Media, Culture, and Society	
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
MSCR 2336	American Film and Culture	
<i>Music</i>		
MUSC 1113	Film Music	
<i>Theatre</i>		
THTR 1101	Introduction to Theatre	
THTR 1270	Introduction to Theatrical Design	
<i>University of Arts London</i>		
Optional London study abroad for fine art at Central Saint Martins, University of Arts London. Complete the following:		16
ARTS 3510	Studio Practice and Exhibition	
ARTS 3520	Critical Disclosures	
ARTS 3530	Studio Practice, Cross-Pathway, and External Projects	

## Plan of Study

### Sample Four Years, Two Co-ops in Spring/Summer 1 Plan of Study Optional

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1124 (and ARTF 1125)	4	Foreign language	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional 2224)	4	Elective	4	Elective	4
ARTF 2220 (with optional 2221)	4	ARTH 1111	4				
ARTH 1110	4	Foreign language	4				
ENGW 1111	4						
		17	16	8	8		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1120 or 1121	4	Co-op	0	Co-op	0	Elective	4
ARTH 2210	4					Elective	4
Arts, media and design elective	4						

Foreign language	4			
EEAM 2000	1			
	17	0	0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTH 2211	4	Co-op	0	Co-op	0	Elective	4
Arts, media, and design elective	4					Elective	4
Elective	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Arts, media, and design elective	4	ARTD 4530	4	Vacation		Vacation	
Arts, media, and design elective	4	Arts, media and design elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
	16		16		0		0

Total Hours: 130

**Notes:**

Optional study abroad with University of the Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&/#38;utm\\_medium=profile&](https://www.arts.ac.uk/?utm_source=qs&/#38;utm_medium=profile&)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

**Design, BFA**

Design is the practice-based discipline that poses important questions about—and provides significant answers to—how we live. Designers are needed when we don't know what is needed as well as when we think we do. Designers propose alternative futures and create new choices using principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action. Concentrations in design practices are graphic and information design, interaction design, and experience design.

Graphic designers make messages and meaning using visual form and the integration of text and image. Their work often has a persuasive intent and uses rules of visual composition, form, and pattern to enable storytelling or to create attention and an ambiance for consideration. Information designers visualize concepts and data to enhance human understanding of complex and vital knowledge. Their work has an enlightening or instructive intent and is based on factual content.

Interaction designers focus on the creation of navigable interfaces and systems that allow audiences to take an active role to achieve meaningful goals. Their work connects people to people and people to information and environments.

Experience designers take a holistic and integrative approach that focuses on the quality of the human experience in concrete situations. They employ research, analysis, creativity, and technology as tools to understand human goals, needs, and desires. Their work examines and improves contexts, systems, services, or events.

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

The major offers optional study abroad with University of Arts London (<https://www.arts.ac.uk/>), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements. All other NUpath requirements must be met through electives.

**Art and Design Core**

Code	Title	Hours
<b>Introduction to College</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools (ARTF 1125)	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Art and Design History</b>		
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2210	Modern Art and Design History	4
ARTH 2211	Contemporary Art and Design History	4

**Design Requirements**

Code	Title	Hours
<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4

ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4

## Design Electives

Code	Title	Hours
<b>Art and Design Elective</b>		
Complete one of the following:		4-6
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTD 2100	Narrative Basics	
ARTG 3510	Contextual and Theoretical Studies 2	
ARTE 3901	Art and Design Special Topics	
ARTE 5901	Special Topics in Art and Design Studio	

### Design History Elective

Complete one of the following:		4
ARTH 1100	Interactive Media and Society	
or ARTH 2215	History of Graphic Design	

### Media Arts Basics Elective

Complete one of the following:		4-6
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2370	Animation Basics (with optional ARTD 2371)	
ARTD 2380	Video Basics (with optional ARTD 2381)	

### Design Management Electives at University of Arts London

Students who study abroad at the University of Arts London will receive general elective credit for the following courses:

ARTG 3530	Interdisciplinary Projects and Practices
ARTG 3520	Marketing Communications and Cultures 2

## Concentrations

Complete one of the concentrations listed below:

- Graphic and Information Design (p. )
- Interaction Design (p. )
- Experience Design (p. )

## Program Requirements

129 total semester hours required

### Concentrations

#### CONCENTRATION IN GRAPHIC AND INFORMATION DESIGN

Code	Title	Hours
<b>Required Courses</b>		
ARTG 2252	Graphic Design 1	4
ARTG 3450	Graphic Design 2	4
<b>Electives</b>		
Complete five of the following. At least one must be at the 4000 level:		20-21

ARTG 2260	Programming Basics
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)
ARTG 3351	Time-Based Design
ARTG 3460	Identity and Brand Design
ARTG 3462	Experience Design 1
ARTG 3700	Interaction Design 2: Mobile
ARTG 4552	Information Design 2
ARTG 4553	Environmental Information Design
ARTG 4554	Typography 3
ARTG 4555	Graphic Design Synthesis
ARTG 5150	Information Visualization Principles and Practices (and ARTG 5151)
ARTE 3901	Art and Design Special Topics
ARTE 4901	Special Topics in Art and Design Studio
ARTE 5901	Special Topics in Art and Design Studio

#### CONCENTRATION IN INTERACTION DESIGN

Code	Title	Hours
<b>Required Courses</b>		
ARTG 2252	Graphic Design 1	4
ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4-5
ARTG 3700	Interaction Design 2: Mobile	4
<b>Electives</b>		
Complete three of the following. At least one must be at the 4000 level:		12
ARTG 3250	Physical Computing	
ARTG 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	
ARTG 4555	Graphic Design Synthesis	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTE 5901	Special Topics in Art and Design Studio	

#### CONCENTRATION IN EXPERIENCE DESIGN

Code	Title	Hours
<b>Required Courses</b>		
ARTG 2260	Programming Basics	4
ARTG 3462	Experience Design 1	4
ARTG 3463	Experience Design 2	4
<b>Electives</b>		
Complete four of the following. At least one must be at the 4000 level:		16
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 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
ARTG 4555	Graphic Design Synthesis
ARTE 3901	Art and Design Special Topics
ARTE 4901	Special Topics in Art and Design Studio
ARTE 5901	Special Topics in Art and Design Studio

ARTH 2211	4 Design elective	4
Media arts elective	4 Design elective	4
Elective	4 Elective	4
		16
		16

Total Hours: 130

### Graphic and Information Design

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1 OR SUMMER 2/FALL PLAN OF STUDY OPTIONAL**

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1124 (and ARTF 1125)	4	ARTF 2220 or 2223 (with optional ARTF 2220 )	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4	Art + design elective	4	Elective	4
ARTG 1250	4	ARTH 2210	4				
ARTH 1111	4	Elective	4				
Elective	4						
		17	16	8	8		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 2223 or 2220 (with optional ARTF 2224)	4	Co-op	4	Co-op	4	Elective	4
ARTG 2252	4					Elective	4
ARTG 3350	4						
Media arts elective	4						
EEAM 2000	1						
		17	0	0	8		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3450	4	Co-op	4	Co-op	4	Elective	4
Design elective	4					Elective	4
Design elective	4						
Design history elective	4						
		16	0	0	8		

#### Year 4

Fall	Hours	Spring	Hours
ARTG 3451	4	ARTG 4550	4
ARTH 2211	4	Design elective	4
Design elective	4	Design elective	4

### Plan of Study

- Experience Design (p. 81)
- Graphic and Information Design (p. 81)
- Interaction Design (p. 82)

### Experience Design

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1 OR SUMMER 2/FALL PLAN OF STUDY OPTIONAL**

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1124 (and ARTF 1125)	4	ARTG 2260	4	ARTF 2220 or 2223 (with optional ARTF 2220)	4
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4	Elective	4	Elective	4
ARTG 1250	4	ARTH 2210	4				
ARTH 1111	4	Elective	4				
Elective	4						
		17	16	8	8		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 2223 or 2220 (with optional ARTF 2224)	4	Co-op	4	Co-op	4	Art + design elective	4
ARTG 3462	4					Elective	4
ARTG 3350	4						
Design elective	4						
EEAM 2000	1						
		17	0	0	8		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3463	4	Co-op	4	Co-op	4	Elective	4
Design elective	4					Elective	4
Design history elective	4						
Elective	4						
		16	0	0	8		

#### Year 4

Fall	Hours	Spring	Hours
ARTG 3451	4	ARTG 4550	4

Elective	4	Elective	4
	16		16

Total Hours: 130

## Interaction Design

### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1 OR SUMMER 2/FALL PLAN OF STUDY OPTIONAL

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1124 (and ARTF 1125)	4	ARTG 2260	4	ARTF 2220 or 2223 (with optional ARTF 2220)	4
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4	Elective	4	Elective	4
ARTG 1250	4	ARTH 2210	4				
ARTH 1111	4	Elective	4				
Elective	4						
	17		16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 2223 or 2220 (with optional ARTF 2224)	4	Co-op		Co-op		Art + design elective	4
ARTG 2400 (with optional ARTG 2401)	4					Elective	4
ARTG 3350	4						
Elective	4						
EEAM 2000	1						
	17		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2252	4	Co-op		Co-op		Elective	4
Design elective	4					Elective	4
Design elective	4						
Media arts elective	4						
	16		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
ARTG 3451	4	ARTG 4550	4
ARTG 3700	4	ARTH 2211	4
Design history elective	4	Design elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

Notes:

Online elective courses are optional while on co-op.

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&/#38;utm\\_medium=profile&](https://www.arts.ac.uk/?utm_source=qs&/#38;utm_medium=profile&)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second year spring semester in London studying design management at London College of Communication (<https://www.arts.ac.uk/subjects/business-and-management-and-science/undergraduate/ba-hons-design-management-lcc/>).

## Game Design, BFA

The Bachelor of Fine Arts in Game Design is designed to provide students with the skills to communicate ideas and emotions through interactive media. The focus of the BFA degree is exploring games as an aesthetic and expressive form through critical analysis and creative, reflective practice. Anticipating emerging trends in the video and analog game industries—including broader platforms, audiences, and distribution channels—students will be oriented toward developing games and playful media in an independent creative context. Curriculum is geared to cultivate students' unique creative voices through courses that apply theoretical analysis to game-development practices across a range of media. Students are exposed to a wide variety of genres and contexts, as well as alternative ways of thinking about games content, platforms, and asset production.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Formal and Quantitative Reasoning (FQ), and Analyzing/Using Data (AD) are met through the major course requirements. All other NUpath requirements must be met through electives.

### Required Courses

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Game Studies</b>		
GAME 1110	Games and Society	4
GAME 2650	Introduction to Game Research Methods	4
<b>Game Design</b>		
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
<b>Game Development</b>		

ARTD 2370	Animation Basics (with optional ARTD 2371 )	4
ARTG 2260	Programming Basics	4
GAME 3300	Game Interface Design	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development and Production	4

**Game Aesthetics**

ARTF 1122	Color and Composition (with optional ARTF 1124 )	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4

**Critical Play**

GAME 2010	The Business of Games	4
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**Capstone**

A grade of C or higher is required:

GAME 4700	Game Design Capstone	4
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**Electives**

Code	Title	Hours
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**Game Design and Development**

Complete two of the following as long as prerequisites have been met: 8

GAME 1850	Experimental Game Design	
GAME 1999	Principles of Board Game Development	
GAME 2991	Research in Game Design	
GAME 3055	Playful Design	

**Game Aesthetics and Critical Play**

Complete two of the following as long as prerequisites have been met: 8

GAME 2355	Narrative for Games	
GAME 2750	Games Criticism and Theory	
GAME 2755	Games and Social Justice	
GAME 4155	Designing Imaginary Worlds	

**Art + Design**

Complete three of the following as long as prerequisites have been met: 12

ARTF 1120	Observational Drawing	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
ARTD 3470	Animation 1	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTG 3250	Physical Computing	

**Art History**

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

**Game Design Major Credit/GPA Requirement**

Complete 92 semester hours for the major with a 2.000 GPA.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	GAME 2500	4	Elective	4	Elective	4
GAME 1110	4	GAME 2650	4	Elective	4	Elective	4
ARTF 1122 (with optional 1123)	4	ARTD 2370 (with optional ARTD 2371)	4				
ARTF 2220 (with optional 2221)	4	ARTF 1124 and ARTF 1125	5				
ENGW 1111	4						
		17		17		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
GAME 2950	4	Co-op		Co-op		Elective	4
GAME 3300	4					Elective	4
ARTG 2260	4						
EEAM 2000	1						
Elective	4						
		17		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
GAME 3400	4	Co-op		Co-op		Elective	4
GAME 3700	4					Elective	4
Art history elective	4						
Elective	4						
		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours
GAME 3800	4	GAME 4700	4
Elective	4	GAME 2010	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	

Total Hours: 131

**Media Arts, BFA**

The continuing revolution in digital computing and global communications has produced a rapidly evolving field for artists who create experiences of image and form with computer screens, intelligent devices, and new materials. Artists also invent tools for exploring, creating, and distributing their ideas and works. Media arts concentrations of animation, photography, and video arts are offered with variations yet to be invented.

Courses in imaginative and narrative arts required for professional work in documentary films, game art, visualization, visual effects, motion graphics, interactive art, illustration, and short animated films are offered at Northeastern. The curriculum in our intensive studio program provides knowledge, experience, and techniques of media arts informed by theory,

experimentation, and critique. Extensive digital imaging and interactive media editing production facilities afford one the opportunity to become highly proficient in the current skills and emerging practices necessary for remarkable work. The media arts are evolving and expanding into culture in daily life and global experience. The revolutions in immersive media, 3D printing, embedded devices, and robotics are changing the landscape in which the media artist will operate. This degree is designed to prepare students to meet the challenges of continuous change with adaptive ingenuity.

The animation concentration provides a comprehensive exploration of the entire production pipeline for a variety of animated content including films, visual effects, broadcast, visualization, games, and spatial media. With a focus on developing robust, conceptual, narrative, and technical software skills, this rigorous studio program explores the power and potential of effective visual communication through 2D and 3D motion design. The animation concentration provides ample opportunities to explore and collaborate with related creative disciplines (VR/AR/XR, game design, interactive, video, etc.) making this a truly unique learning experience. Throughout their education, students will work to develop a professional-level portfolio—the centerpiece of which will be a one-year capstone project—demonstrating mastery in their specific area of focus.

The photography concentration encourages experimental and self-disciplined engagement with photographic processes in order to understand how materials function, both as a physical component of photographic work as well as a signifier of meaning. Concept and process are in constant dialogue, and we believe learning through doing cultivates individual vision and working methods. Each student's creative approach establishes a vital platform for discovery. In addition, theory and conceptual development provide students with necessary analytical tools for understanding and analyzing visual and technological trends in current and future photographic practices.

Young professionals today must meet challenges—as well as enjoy opportunities—to be more creative, adaptive, and innovative as active practitioners within our contemporary visual culture and evolving technological environment. Our responsibility as liberal arts educators is to expand the skills and vision of each student in light of their individual and professional goals. At a time when initiative, creativity, and innovation are leading principles for social and economic progress, it is important to stress the ways in which their artistic and creative endeavors can make a rewarding and meaningful contribution.

Northeastern photography program students find themselves in the center of Boston's creative hub, across from the Museum of Fine Arts. Northeastern's own Center for the Arts directs interdisciplinary research and presents exhibitions and innovative programs. The newly renovated Media Hub offers state-of-the-art equipment rentals and digital printing resources. Photography students have access to two large computer labs and an alternative photographic processes darkroom with film processing and analog printing capabilities.

Our foundation photography courses are small studio and lab classes, leading to intermediate and advanced studios and seminars with an emphasis on personal vision developed through lectures, critiques, individual meetings, and research. In addition, guest artists are invited to participate and offer insights.

The video arts concentration is a multidisciplinary field focused on creative video expression and messaging that weaves together art and design foundations; art and design history; video production; cinematic language (including documentary, narrative, and experimental strategies); collaborative frameworks; and theories of social and cultural change. The scope of the video arts curriculum is a broader and more diverse

tapestry than traditional video art and it reflects the dynamic evolution of video in multiple contexts. The video arts concentration enables students to explore traditional, alternative, and other artistic means of video art production in a variety of creative and technical contexts. The focus on a multiplicity of artistic formats—hence, the choice of the title video arts—underscores our attention to the training of students who are interested in learning how to experiment with new technical, narrative, and aesthetic practices and incorporate these options into the traditional medium of video art.

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&/#38;utm\\_medium=profile&](https://www.arts.ac.uk/?utm_source=qs&/#38;utm_medium=profile&)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Creative Expression and Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUPath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through general electives.

## Art and Design Core

Code	Title	Hours
<b>Introduction to College</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Art and Design History</b>		
ARTH 1110	Global Art and Design History: Ancient to Medieval	4
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2210	Modern Art and Design History	4

## Media Arts Requirements

Code	Title	Hours
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### 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: 4

ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	
ARTD 2370	Animation Basics (with optional ARTD 2371 )	
ARTD 2380	Video Basics (with optional ARTD 2381 )	

### Media Arts History Elective

Complete one of the following: 4

ARTH 2211	Contemporary Art and Design History	
ARTH 2212	Survey of the Still and Moving Image	
ARTH 1100	Interactive Media and Society	

### Design Requirement

ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
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### Degree Project

ARTD 4530	Media Arts Degree Project 1	4
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## Media Arts Electives or Concentration

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

- Animation (p. 85)
- Photography (p. 86)
- Video Arts (p. 86)

Code	Title	Hours
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Note: Courses in this requirement may not be used for the drawing fundamentals elective or media arts history elective.

Complete 24 semester hours from the following: 24

ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 1100	Interactive Media and Society	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2213	Nineteenth-Century Art	
ARTH 5100	Contemporary Art Theory and Criticism	
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: Concept + Process	
ARTD 3470	Animation 1	

ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	
ARTD 4577	Digital Sculpture and Model Making	
ARTD 5582	Collaborative Video and Community Engagement	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTG 3351	Time-Based Design	

### Sound Management at University of Arts London

Optional London study abroad for sound management at Central Saint Martins, University of Arts London. Complete the following:

INAM 3510	Applied Sound Design	
INAM 3520	Collaborative Project	
INAM 3540	Sound Culture: Perception and Communication 2	
INAM 3550	Sound Practitioners 2	

## Program Requirement

130 total semester hours required

## Concentrations (Animation/Photography/Video Arts)

### CONCENTRATION IN ANIMATION

Code	Title	Hours
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#### Animation Requirements

ARTD 2100	Narrative Basics	4
ARTD 2370	Animation Basics (with optional ARTD 2371)	4
ARTD 3470	Animation 1	4
ARTD 4570	Animation 2	4

#### Animation Electives

Complete three of the following. At least one must be at the 4000 level: 12

ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 4575	Animation 3	
ARTD 4577	Digital Sculpture and Model Making	
ARTD 3473	Animation for Games	

#### Art and Design Elective

Note: Courses in this requirement may not be used for the drawing fundamentals elective, media arts basics elective, media arts history elective, or animation electives.

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



**CONCENTRATION IN PHOTOGRAPHY**

Code	Title	Hours
<b>Photography Requirements</b>		
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	4
ARTD 3460	Photography: Concept + Process	4
ARTD 4565	Photography: Visual Strategies + Context	4

<b>Photography Elective</b>		
ARTD 4660	Studio Photography	4
or ARTD 4661	Photography: Experimental Processes	

**Art and Design Electives**  
 Note: Courses in this requirement may not be used for the drawing fundamentals elective, media arts basics elective, media arts history elective, or photography elective.  
 Complete any three ARTG, ARTE, ARTD, ARTH, ARTS, or GAME courses as long as prerequisites have been met. At least one must be a 4000-level course. 12

**CONCENTRATION IN VIDEO ARTS**

Code	Title	Hours
<b>Video Arts Requirements</b>		
ARTD 2380	Video Basics (with optional ARTD 2381 )	4
ARTD 3480	Video: Sound and Image	4
ARTD 5582	Collaborative Video and Community Engagement	4

<b>Video Arts Electives</b>		
Complete three of the following:		12
ARTD 3485	Experimental Video	
MSCR 2160	Narrative Filmmaking	
MSCR 3446	Documentary Production	
MSCR 3389	Screenwriting	
ARTH 2212	Survey of the Still and Moving Image	
THTR 2345	Acting for the Camera	

Optional London study abroad for sound management at Central Saint Martins, University of Arts London. Complete the following:

INAM 3510	Applied Sound Design	
INAM 3540	Sound Culture: Perception and Communication 2	

**Art and Design Electives**  
 Note: Courses in this requirement may not be used for the drawing fundamentals elective, media arts basics elective, and media arts history elective.  
 Complete any three ARTG, ARTE, ARTD, ARTH, ARTS, or GAME courses as long as prerequisites have been met. At least one must be a 4000-level course. 12

Optional London study abroad for sound management at Central Saint Martins, University of Arts London. Complete the following:

INAM 3520	Collaborative Project	
INAM 3550	Sound Practitioners 2	

**Plan of Study**

- No Concentration (p. 86)
- Animation (p. 87)

- Photography (p. 87)
- Video Arts (p. 88)

**No Concentration**

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE-ZA PLAN OF STUDY ONLY**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1122 (with optional ARTF 1123)	4	Elective	4	Elective	4
ARTF 1124 and ARTF 1125	5	ARTF 2220 (with optional ARTF 2221)	4	Elective	4	Elective	4
Drawing fundamentals elective	4	ARTH 1111	4				
ARTH 1110	4	Media arts history elective	4				
ENGW 1111	4						
		18		16		8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 2223 (with optional ARTF 2224)	4	Co-op		Co-op		Elective	4
ARTH 2210	4					Elective	4
Media arts basics elective	4						
Elective	4						
EEAM 2000	1						
		17		0		0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2250 (with optional ARTG 2251)	4	Co-op		Co-op		Elective	4
Media arts elective	4					Elective	4
Elective	4						
Elective	4						
		16		0		0	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 2	Hours
Media arts elective	4	ARTD 4530	4	Vacation	
Media arts elective	4	Media arts elective	4		
Media arts elective	4	Media arts elective	4		

Elective	4	Elective	4		
	16		16		0

Total Hours: 131

### Animation

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE-ZA PLAN OF STUDY ONLY**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional 2224)	4	Elective	4
Drawing fundamentals elective	4	ARTF 1124 and ARTF 1125	5	Elective	4	Elective	4
ARTF 2220 (with optional ARTF 2221)	4	ARTD 2370	4				
ARTH 1110	4	ARTH 1111	4				
ENGW 1111	4						
	17		17		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 2100	4	Co-op		Co-op		Elective	4
ARTD 3470	4					Elective	4
Animation elective	4						
Media arts basics elective	4						
EEAM 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 4570	4	Co-op		Co-op		Elective	4
ARTG 2250 (with optional ARTG 2251)	4					Elective	4
ARTH 2210	4						
Media arts history elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Animation elective	4	ARTD 4530	4
Art and design elective	4	Elective	4
Art and design elective	4	Elective	4

Elective	4	Elective	4		
	16		16		

Total Hours: 131

### Photography

**SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE-ZA PLAN OF STUDY ONLY**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4	Elective	4
ARTF 1124 and ARTF 1125	5	ARTD 2360 (with optional 2361)	4				
ARTH 1110	4	ARTH 1111	4				
ENGW 1111	4						
	18		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 3460	4	Co-op		Co-op		Elective	4
Photography elective	4					Elective	4
Drawing fundamentals elective	4						
ARTH 2210	4						
EEAM 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 4565	4	Co-op		Co-op		Elective	4
ARTG 2250 (with optional ARTG 2251)	4					Elective	4
Media arts basics elective	4						
Media arts history elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Art and design elective	4	ARTD 4530	4
Art and design elective	4	Art and design elective	4
Elective	4	Elective	4

Elective	4	Elective	4
	16		16

Total Hours: 131

## Video Arts

### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1/SAMPLE--ZA PLAN OF STUDY ONLY

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4	Elective	4
ARTF 1124 and ARTF 1125	5	ARTH 1111	4				
ARTH 1110	4	Art and design elective	4				
ENGW 1111	4						
	18		16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 2380 (with optional ARTD 2381)	4	Co-op		Co-op		Elective	4
Video arts elective	4					Elective	4
Drawing fundamentals elective	4						
ARTH 2210	4						
EEAM 2000	1						
	17		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTD 3480	4	Co-op		Co-op		Elective	4
ARTG 2250 (with optional ARTG 2251)	4					Elective	4
Media arts basics elective	4						
Media arts history elective	4						
	16		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
ARTD 5582	4	ARTD 4530	4
Video arts elective	4	Video arts elective	4

Art and design elective	4	Art and design elective	4
Elective	4	Elective	4
	16		16

Total Hours: 131

#### Notes:

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&/#38;utm\\_medium=profile&](https://www.arts.ac.uk/?utm_source=qs&/#38;utm_medium=profile&)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

## Studio Art, BFA

Our Bachelor of Fine Arts in Studio Art is offered in partnership with the School of the Museum of Fine Arts at Tufts (<https://smfa.tufts.edu/>) University (SMFA at Tufts) across Huntington Avenue from our campus. In this major, your studio art classes are taken at the SMFA at Tufts, which allows students to explore a wide range of artistic media, including ceramics, drawing, film, metalsmithing, painting, performance, printing, sculpture, and sound in their extensive studio environments. Our students complete art and design history courses in our department and they have access to all the elective courses, co-op, and study-abroad programs; student resources; and activities that Northeastern students experience.

The BFA in studio art degree is awarded by Northeastern.

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&/#38;utm\\_medium=profile&](https://www.arts.ac.uk/?utm_source=qs&/#38;utm_medium=profile&)), based in the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through general electives.

*Note:* The BFA in studio art is a joint degree program offered in collaboration with the School of the Museum of Fine Arts at Tufts University (SMFA at Tufts), which is affiliated with Tufts University. Art

and design history and general education requirements are offered at Northeastern University, and studio art courses, which are determined in consultation with academic advisers at the SMFA at Tufts, are targeted to each student's unique program of study.

### Art History Requirements for Studio Art

A cumulative grade-point average (GPA) of 2.500 or higher is required for the art history requirements.

Code	Title	Hours
<b>Art History Required Courses</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2211	Contemporary Art and Design History	4
<b>Art and Design History Electives</b>		
Complete three of the following:		12
ARCH 1310	Buildings and Cities, A Global History	
ARCH 1320	Architecture and Global Cultures, 1400 to Present	
ARCH 1350	American Architecture	
ARCH 2330	Architecture and the City in the Nineteenth Century	
ARCH 2340	Modern Architecture	
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 1100	Interactive Media and Society	
ARTH 1110	Global Art and Design History: Ancient to Medieval	
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2212	Survey of the Still and Moving Image	
ARTH 2213	Nineteenth-Century Art	
ARTH 5100	Contemporary Art Theory and Criticism	
ARTH 5200	Issues in Contemporary Art	
ARTH 5400	Contemporary Visual Culture	
ARTH 5902	Special Topics in Art and Design History	
CLTR 1240	Latin American Film	
CLTR 1260	Japanese Film	
ECON 1281	Economics of the Creative Industries	
GAME 1110	Games and Society	
MSCR 1220	Media, Culture, and Society	
MSCR 2302	Advertising and Promotional Culture	
MSCR 2336	American Film and Culture	
MSCR 3392	Gender and Film	
MSCR 3426	Popular Music as Media Form	
MSCR 3600	Film Theory	
MSCR 3920	Topics in Film Studies	
MUSC 1113	Film Music	

### Studio Art Courses

Code	Title	Hours
<b>Studio Art</b>		
Specific courses are targeted to each student's unique program of study, which is determined in consultation with an academic adviser at SMFA at Tufts and CAMD. Optional credits for London study abroad or SMFA at Tufts. These courses generally have the following course number:		68
SMFA 3000	Museum of Fine Arts Studio (4 to 12 SH)	
Optional London study abroad for fine art at Central Saint Martins, University of Arts London. Complete the following:		
ARTS 3510	Studio Practice and Exhibition	
ARTS 3520	Critical Disclosures	
ARTS 3530	Studio Practice, Cross-Pathway, and External Projects	
Senior thesis is a self-directed studio practice and exhibition under consultation of senior thesis faculty at SMFA at Tufts. These courses are generally in the SMFA subject area.		8
<b>Senior Thesis Capstone</b>		
SMFA 4000	Museum of Fine Arts Capstone	

### Studio Art Major Credit Requirement

Complete 96 semester hours in the major.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000	1	SMFA 3000	10	Elective	4	Vacation	0
SMFA 3000	10	ARTH 2210	4	Elective	4		
ENGW 1111	4	ENGW 1111	4				
Art history elective	4						
		19		18		8	
0							
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SMFA 3000	10	Co-op	0	Co-op	0	Elective	4
SMFA 3000	4					Elective	4
ARTH 2211	4						
EEAM 2010	1						
		19		0		0	
8							
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SMFA 3000	10	Co-op	0	Co-op	0	Elective	4
SMFA 3000	4	ENGW 3314 (Online)	4			Elective	4
Art history elective	4						
		18		4		0	
8							
Year 4							
Fall	Hours	Spring	Hours				
SMFA 3000	10	SMFA 3000	10				

SMFA 4000	4	SMFA 4000	4
Art history elective	4	Elective	4
		18	18

Total Hours: 138

#### Notes:

Optional study abroad with University of Arts London ([https://www.arts.ac.uk/?utm\\_source=qs&/#38;utm\\_medium=profile&](https://www.arts.ac.uk/?utm_source=qs&/#38;utm_medium=profile&)), based at the heart of one of the world's creative capitals, London. Students from this program will have the opportunity to spend their second spring semester in London studying fine art at Central Saint Martins (<https://www.arts.ac.uk/subjects/fine-art/undergraduate/ba-hons-fine-art-csm/>).

### 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. 46).

#### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

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

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

#### Architecture Requirements

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1310	Buildings and Cities, A Global History	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 and the City in the Nineteenth Century	4
ARCH 2340	Modern Architecture	4
<b>Electives</b>		
Complete two of the following courses:		8
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
ARCH 5310	Design Tactics and Operations	

#### Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Electives</b>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (with optional ARTF 1124)	
ARTF 2223	Experience and Interaction (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
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							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Vacation	0	Vacation	0
ARTG 1250	4	ARCH 1120	6				
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2220 (with optional ARTF 2221)	4				
ENGW 1111	4	ARCH 1320	4				
ARCH 1310	4						
	17		18		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340	4	Vacation	0	Vacation	0
ARTG 2250 (with optional ARTG 2251)	4	ARTG 2252	4				
ARTH 2210	4	ARCH 1450	4				
ARCH 2330	4	Elective	4				
	18		16		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Architecture elective	4	Co-op	0	Co-op	0	Vacation	0
ARTG 3350	4						
ARTH 2215	4						
ENGW 3314 or 3315	4						
EEAM 2000	1						
	17		0		0		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Architecture elective	4	Co-op	0	Co-op	0	Vacation	0
ARTG 3451	4						
Elective	4						
Elective	4						
	16		0		0		0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 4550	4	ARTG 4551	4				
Art and design elective	4	Elective	4				

Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 134

**Behavioral Neuroscience and Design, BS**

The behavioral neuroscience and design combined major engages students in an interdisciplinary study across the biology, psychology, and Art + Design departments to integrate fundamental design courses with a strong foundation in the physiological brain mechanisms that give rise to behavioral functions. The latest research in neuroscience and psychology enables designers to maximize the impact of their designs and, conversely, complex neuroscientific concepts can be made intelligible to a wider public through creative visual works. Students in this major have the opportunity to learn about the inner workings of the brain and how its various structures interact to enhance their approach to design methodologies. Students can then apply these principles to biomimetic medical devices as well as data and network visualization.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Behavioral Neuroscience Requirements**

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1251 or MATH 1341	Calculus and Differential Equations for Biology 1 Calculus 1 for Science and Engineering	4
<b>Statistics Foundation</b>		
Complete one of the following:		

ENVR 2500 and ENVR 2501 or PSYC 2320	Biostatistics and Lab for ENVR 2500 Statistics in Psychological Research	4-5
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**Behavioral Neuroscience Foundations**

PSYC 3200	Clinical Neuroanatomy	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4

**Behavioral Neuroscience Core Courses**

Complete two of the following: 8

BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

<sup>1</sup> Students entering through CAMD may take Art and Design at Northeastern (ARTF 1000).

<sup>2</sup> Students entering through CAMD may take Professional Development for Co-op (EEAM 2000).

**Design Requirements**

Code	Title	Hours
<b>Foundations</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4

Complete one of the following: 4-5

ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	

**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 or ARTG 5330	Information Design 1 Visualization Technologies 1: Fundamentals	4

**Art + Design History**

Complete one of the following: 4

ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	

ARTH 2211	Contemporary Art and Design History	
ARTH 2213	Nineteenth-Century Art	
<b>Degree Capstone Project</b>		
ARTG 4550	Design Degree Project 1	4

**Design Options**

Code	Title	Hours
Complete one of the following options: 8		

**Interaction Design Option**

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

**Graphic and Information Design Option**

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

**Experience Design Option**

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
BIOL 5587	Comparative Neurobiology	4
ARTG 5310	Visual Cognition	4

**Upper-Division Elective**

Complete one course that is not already taken as long as prerequisites have been met: 4

Any 2000-level or higher ARTG, ARTE, ARTD, ARTH, or ARTS course

BNSC 4970 or higher

BIOL 3403 or higher

PSYC 3404 or higher

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

**Advanced Writing in the Disciplines**

ENGW 3307 or ENGW 3314 or ENGW 3315	Advanced Writing in the Sciences Advanced Writing in the Arts, Media, and Design Interdisciplinary Advanced Writing in the Disciplines	4
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**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Major Credit Hour Requirement**

104 semester hours in the major.

**Program Requirements**

133 total semester hours required

**Plan of Study****SAMPLE PATTERNS:  
FOUR YEARS, TWO CO-OPS****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000 or ARTF 1000	1	BIOL 2299	4	ARTG 2250	4	PSYC 3452	4
BIOL 1107 and BIOL 1108	5	MATH 1251	4	PSYC 2320	4	General elective	4
CHEM 1161 and CHEM 1162 and CHEM 1163	5	ARTG 1250	4				
PSYC 1101	4	ENGW 1111	4				
ARTF 1122	4						
	19		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3458	4	Co-op		Co-op		ARTG 3350	4
BIOL 2301 and BIOL 2302	5					General elective	4
CHEM 2311 and CHEM 2312	5						
A+D foundations 2	4						
EESC 2000 or EEAM 2000	1						
	19		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	Co-op		Co-op		ENGW 3315	4
ARTG 3451 or 5330	4					General elective	4
Design option level 1	4						
BNS core course	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
BIOL 5587	4	ARTG 4550	4
ARTG 5310	4	BNS core course	4
Design option level 2	4	Upper- division elective	4

A+D history course	4	General elective	4
	16		16

Total Hours: 134

**FIVE YEARS, THREE CO-OPS****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000 or ARTF 1000	1	BIOL 2299	4	Vacation		Vacation	
PSYC 1101	4	MATH 1251	4				
BIOL 1107 and BIOL 1108	5	ARTG 1250	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5	ENGW 1111	4				
ARTF 1122	4						
	19		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3452	4	Co-op		Co-op		PSYC 2320	4
CHEM 2311 and CHEM 2312	5					ARTG 3350	4
ARTG 2250	4						
A+D foundations 2	4						
EESC 2000 or EEAM 2000	1						
	18		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	Co-op		Co-op		Vacation	
PSYC 3458	4						
BIOL 2301 and BIOL 2302	5						
Design option level 1	4						
	17		0		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3451 or 5330	4	Co-op		Co-op		ENGW 3315	4
Design option level 2	4					General elective	4
BNS core course	4						

General elective	4			
	16	0	0	8
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
BIOL 5587	4	ARTG 4550	4	
ARTG 5310	4	BNS core course	4	
A+D history course	4	Upper-division elective	4	
General elective	4	General elective	4	
	16		16	

Total Hours: 134

## Business Administration and Design, BS

The combined major in business administration and design integrates fundamental design courses with the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. The BS degree can be accomplished using the five-year co-op plan.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Business Core Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or ARTF 1000	Art and Design at Northeastern	
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1260	Math Fundamentals for Games	
<b>Macroeconomics and Microeconomics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4

### Business Statistics

MGSC 2301	Business Statistics	4
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### International Business/Social Responsibility

INTB 1203	International Business and Global Social Responsibility	4
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### Marketing

MKTG 2201	Introduction to Marketing	4
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### Finance

FINA 2201	Financial Management	4
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### Organizational Behavior

ORGB 3201	Organizational Behavior	4
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### Strategy in Action

STRT 4501	Strategy in Action	4
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### Business Core Option

Complete one of the following:		4
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ACCT 2301	Managerial Accounting
ENTR 2301	Innovation!
MISM 2301	Management Information Systems
SCHM 2301	Supply Chain and Operations Management

### Professional Development

BUSN 1103	Professional Development for Business Co-op	1
or EEAM 2000	Professional Development for Co-op	

### Business Concentration

Complete one of the following business concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

### Second Business Concentration (Optional)

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

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291)

- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

### Design Requirements

Code	Title	Hours
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#### Art + Design Fundamentals Required

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
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#### Art + Design Fundamentals Elective

Complete one of the following: 4-5

ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	

#### Design Required

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

#### Design Elective

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

#### Art History Elective

Complete any one ARTH course. 4

#### Art + Design Elective

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

#### Degree Capstone Project

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

Code	Title	Hours
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Complete one of the following options: 8

#### Interaction Design Option

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

#### Graphic and Information Design Option

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

#### Experience Design Option

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

### Integrative Course

Code	Title	Hours
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Note: Integrative course is required above.

ARTG 4550	Design Degree Project 1	
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### Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Program Requirement

128 total semester hours required

### Plan of Study Four Years, Two Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
BUSN 1102 or ARTF 1000	1	ECON 1115 or 1116	4	ARTG 2250 (with optional ARTG 2251)	4	Art + Design fundamentals elective	4	
ACCT 1201	4	MGSC 2301	4	Elective	4	Elective	4	
ARTF 1122 (with optional ARTF 1123)	4	ARTG 1250	4					
Art History Elective	4	Math Elective	4					
ENGW 1111	4							
		17			16			8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
INTB 1203	4	Business concentration introductory course	4	FINA 2201	4	Co-op	0	
ARTG 3350	4	Business core option	4	Elective	4			
Design option 1	4	Design option 2	4					
MKTG 2201	4	Art + Design elective	4					
		BUSN 1103 or EEAM 2000	1					
		16			17			8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Co-op	0	ORGB 3201	4	Business concentration elective course 2	4	Co-op	0	
		Business concentration elective course 1	4	Elective	4			
		Design elective	4					
		ENGW 3314 or 3315	4					
		0			16			8

		0			16			8
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**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	STRT 4501	4
		ARTG 4550	4
		Business concentration course	4
		Elective	4
	0		16

Total Hours: 130

## Computer Science and Design, BS

The combined major in computer science and design integrates fundamental design courses with a strong programming foundation. Students will declare a concentration in interaction design, graphic and information design, or experience design. Students in this major often have an interest in human-centered design methods used in developing digital interfaces and applications.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210 or EEAM 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1

### Computer Science Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 8

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Design Requirements

Code	Title	Hours
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#### Art + Design Fundamentals Required

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
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#### Art + Design Fundamentals Elective

Complete one of the following: 4-5

ARTF 1121 Conceptual Drawing

ARTF 1124  
and ARTF 1125 Form and Structure  
and Form and Structure Tools

ARTF 2220 Movement and Time (with optional ARTF 2221)

ARTF 2223 Experience and Interaction (with optional ARTF 2224)

#### Design Required

ARTG 1250 Design Process Context and Systems 4

ARTG 2250 Typography 1 4

ARTG 3350 Typography 2 4

ARTG 3451 Information Design 1 4

#### Design Elective

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

#### Art + Design History Elective

Complete any one ARTH course. 4

#### Art + Design Elective

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

#### Degree Capstone Project

ARTG 4550 Design Degree Project 1 4

### Design Options

Code	Title	Hours
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Complete one of the following options: 8

#### Interaction Design Option

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

ARTG 3700 Interaction Design 2: Mobile

Code	Title	Hours
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#### Graphic and Information Design Option

ARTG 2252 Graphic Design 1

ARTG 3450 Graphic Design 2

Code	Title	Hours
<b>Experience Design Option</b>		
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

### Degree-Focused Electives

Code	Title	Hours
Complete two courses from the following lists: 8		
<i>Art + Design</i>		
Complete any ARTG or ARTE courses as long as prerequisites have been met.		
<i>Psychology</i>		
PSYC 1101	Foundations of Psychology	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<i>Computer Science</i>		
CS 3200	Database Design	
CS 3520	Programming in C++	
CS 3540	Game Programming	
CS 3650	Computer Systems	
CS 3700	Networks and Distributed Systems	
CS 3800	Theory of Computation	
CS 4100	Artificial Intelligence	
CS 4150	Game Artificial Intelligence	
CS 4300	Computer Graphics	
CS 4400	Programming Languages	
CS 4520	Mobile Application Development	
CS 4550	Web Development	
CS 4850	Building Game Engines	
IS 2000	Principles of Information Science	
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
DS 4420	Machine Learning and Data Mining 2	
CS 4991	Research	
CS 4992	Directed Study	
CS 4993	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 4550	Design Degree Project 1	

### Supporting Course

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	

CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

### Computer Science and Design Major Credit Requirement

96 SH are required in the major.

### Program Requirement

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 ARTF 1000	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	ARTG 1250	4				
CS 2500 and CS 2501	5	A+D Fundamentals elective	4				
ARTF 1122 (with optional ARTF 1123)	4	Elective	4				
ENGW 1111	4						
		19		17		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op 1		Co-op 1		Elective	4
CS 3500	4					Elective	4
ARTG 2250 (with optional ARTG 2251)	4						
Design option 1	4						
CS 1210 or EEAM 2000	1						
		17		0		0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	Co-op 2		Co-op 2		ENGW 3302 or 3315	4
THTR 1170	1					Elective	4
ARTG 3350	4						
Art + Design History Elective	4						
Design option 2	4						
		17		0		0	8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3451	4	Co-op 3		Co-op 3			
Computing and social issues elective	4						
Degree-focused elective 1	4						
Art + Design elective	4						
		16		0		0	

Year 5			
Fall	Hours	Spring	Hours
CS 4500 (and CS 4501)	4	CS elective	4
ARTG 4550	4	Degree-focused elective 2	4
CS elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 134

\* Indicates course must be taken in the semester listed.

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200 or ARTF 1000	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	ARTG 1250	4	CS 3000	4		
CS 2500 and CS 2501	5	A+D fundamentals elective	4				
ARTF 1122 (with optional ARTF 1123)	4	Elective	4				
ENGW 1111	4						
		19		17		8	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2250 (with optional ARTG 2251)	4	Co-op 1		Co-op 1		ENGW 3302	4
Art + Design History Elective	4					Elective	4
Design option 1	4						
Degree-focused elective 1	4						
CS 1210 or EEAM 2000	1						
		17		0		0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	Co-op 2		Co-op 2		Elective	4
THTR 1170	1					Elective	4
ARTG 3350	4						
Computing and social issues	4						

Design option 2	4				
	17	0	0		8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CS 4500 (and CS 4501)	4	Degree-focused elective 2	4	Elective	4
ARTG 3451	4	Art + Design elective	4	Elective	4
ARTG 4550	4	CS elective	4		
Elective	4	CS elective	4		
	16		16		8

Total Hours: 134

## Computer Science and Game Development, BS

The computer science and game development combined major focuses on the specific skills needed to succeed in the highly competitive game industry. Students will engage in building and developing games and playable media experiences while completing courses in computer science and specialized game technology and design. Interdisciplinary courses enable students to develop their creative and entrepreneurial abilities, as well as create a strong portfolio of game pieces.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210 or EEAM 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	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
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4850	Building Game Engines (Integrative course)	4
<b>Computer Science Elective Course</b>		
CS 4150 or IS 4300	Game Artificial Intelligence (Integrative course) Human Computer Interaction	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1

### Game Design Courses

Code	Title	Hours
<b>Game Design Required</b>		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development and Production	4
GAME 4700	Game Design Capstone	4
<b>Game Design Elective</b>		
GAME 1850 or GAME 3300	Experimental Game Design Game Interface Design	4
<b>Khoury/Game-Related Electives</b>		
Complete three courses from the following:		12
Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.		
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
MATH 1342	Calculus 2 for Science and Engineering	
ECON 2350 or PSYC 2320	Statistics Statistics in Psychological Research	

### Supporting Courses

Code	Title	Hours
<b>Psychology</b>		
PSYC 1101	Foundations of Psychology	4
<b>Mathematics</b>		
Complete two courses from Math department or the following:		
MATH 1260	Math Fundamentals for Games (Integrative course)	4
MATH 1341	Calculus 1 for Science and Engineering	4

### Computer Science Writing Requirement

Code	Title	Hours
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**College Writing**  
 ENGW 1111 First-Year Writing 4

**Advanced Writing in the Disciplines**  
 Students are strongly encouraged to take Advanced Writing in the Technical Professions (ENGW 3302) but may substitute Interdisciplinary Advanced Writing in the Disciplines (ENGW 3315).

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
	Complete 12 credits of general electives.	12

### Khoury College GPA Requirements

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills through Experience is satisfied through co-op.*

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Pattern, Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200 or ARTF 1000	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	MATH 1260	4	MATH 1341	4		
CS 2500 and CS 2501	5	GAME 2500	4				
ENGW 1111	4	Elective	4				
GAME 1110	4						
		19	17	8	0		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3520 (*)	4	CS 1210 or EEAM 2000	1	Elective	4	Co-op	
CS 3000	4	CS 3540 (*)	4	Elective	4		
GAME 2950	4	CS 3650	4				

GAME 3400	4	GAME 3700	4
		Khoury/ game elective	4
		16	17
		8	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4850 (*)	4	Co-op	0	Co-op	0
		CS 4300	4				
		ENGW 3302	4				
		PSYC 1101	4				
		THTR 1170	1				
		0	17	0	0		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3700	4	GAME 4700	4			Vacation	0
CS 4500	4	Computer science elective	4				
GAME 3800	4	Khoury/ game elective	4				
		Khoury/ game elective	4	Game Design Elective	4		
		16	16				

Total Hours: 134

\*Indicates courses that must be taken in the semester listed.

## Computer Science and Media Arts, BS

The computer science and media arts combined major is ideal for creative students who love technology. Students will acquire a solid foundation in both fields through curriculum that spans photography, animation, video, database design, computer graphics, and human-computer interaction.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1



CS 1210	Professional Development for Khoury Co-op	1
or EEAM 2000	Professional Development for Co-op	

**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4300	Computer Graphics	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		8
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

**Media Arts Courses**

Code	Title	Hours
<b>Required Media Arts Courses</b>		
ARTD 2100	Narrative Basics	4
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

**Media Arts Electives**

Complete any six courses as long as prerequisites have been met. At least two must be a 3000-level course.

**Basics**

ARTD 2360	Introduction to Photography	
ARTD 2370	Animation Basics	
ARTD 2380	Video Basics	

**Photography**

ARTD 3460	Photography: Concept + Process	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	

**Animation**

ARTD 3470	Animation 1	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	
ARTD 4577	Digital Sculpture and Model Making	

**Video**

ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
ARTD 5582	Collaborative Video and Community Engagement	

**History**

ARTH 2212	Survey of the Still and Moving Image	
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**Media Arts Capstone**

ARTD 4530	Media Arts Degree Project 1	4
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**Supporting Courses**

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 2331	Linear Algebra	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Integrative Courses**

The following courses are fulfilled through the computer science requirement:

CS 4300	Computer Graphics
IS 4300	Human Computer Interaction

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Integrating Knowledge and Skills Through Experience
- Demonstrating Thought and Action in a Capstone

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

131 total semester hours required

### Plan of Study

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510	4	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	CS 2511	1	ARTF 1120	4		
CS 2500	4	CS 3200	4				
CS 2501	1	ARTF 1122 (with optionals ARTF 1123)	4				
ARTF 1124 and ARTF 1125	5	ARTF 2223 (with optional 2224)	4				
ENGW 1111	4						
20		17		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					Khoury elective	4
CS 3000	4						
ARTF 2220 (with optional 2221)	4						

ARTD 2100	4						
17		0		0		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1170	1	Co-op		0 Co-op		0 Khoury elective	4
CS 4300	4	ENGW 3302	4			Khoury elective	4
Khoury elective	4						
Media arts elective	4						
Media arts elective	4						
17		4		0		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4500	4	ARTD 4530	4				
Khoury elective	4	Computing and social issues	4				
Media arts elective	4	Media arts elective	4				
Media arts elective	4	Media arts elective	4				
16		16					

Total Hours: 131

\*Indicates course must be taken in the term listed.

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	Elective	4		
CS 2500 and CS 2501	5	ARTF 1120	4				
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2220 (with optional ARTF 2221)	4				
ENGW 1111	4						
19		17		8		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op		Co-op		Elective	4
IS 4300	4					Elective	4
CS 3000	4						
ARTD 2100	4						
Media arts elective	4						
17		0		0		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1170	1	Co-op	0	Co-op	0	Vacation	0
MATH 2331	4						
Khoury elective	4						
ARTF 1124 and ARTF 1125	5						
ARTF 2223 (with optional ARTF 2224)	4						
	18		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
Khoury elective	4	ENGW 3302	4				
Media arts elective	4						
Media arts elective	4						
	16		4		0		0

Year 5			
Fall	Hours	Spring	Hours
CS 4500	4	ARTD 4530	4
Media arts elective	4	Computing and social issues	4
Media arts elective	4	Media arts elective	4
Elective	4	Elective	4
	16		16

Total Hours: 139

\*Indicates course must be taken in the term listed.

## Communication Studies and Graphic and Information Design, BA

The Department of Communication Studies and the Department of Art + Design offer a combined major in communication studies and graphic and information design. Students interested in the combined major integrate the study of communication skills and processes with the design of message and meaning, integrating text, image, and data.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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. 12

**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**

ARTF 1122 Color and Composition (with optional ARTF 1123) 4

ARTF 2220 Movement and Time (with optional ARTF 2221) 4

**Art and Design History**

ARTH 2210 Modern Art and Design History 4

ARTH 2215 History of Graphic Design 4

**Design**

ARTG 1250 Design Process Context and Systems 4

ARTG 2250 Typography 1 (with optional ARTG 2251) 4

ARTG 2252 Graphic Design 1 4

ARTG 3350 Typography 2 4

ARTG 3451 Information Design 1 4

**Degree Project**

ARTG 4550 Design Degree Project 1 4

**Graphic and Information Design Elective**

Complete one course with the corresponding tools course, if indicated, from the following: 4

ARTD 2360 Introduction to Photography (with optional ARTD 2361)

ARTD 2380 Video Basics (with optional ARTD 2381)

ARTG 2260 Programming Basics

ARTF 1120 Observational Drawing

ARTF 1121 Conceptual Drawing

ARTF 1124 Form and Structure (with optional ARTF 1125)

ARTF 2223 Experience and Interaction (with optional ARTF 2224)

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

ARTG 3351 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 Course**

COMM 4602 Contemporary Rhetorical Theory 4  
or ARTG 4551 Design Degree Project 2

**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 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
ARTF 1000 or COMM 1000	1	ENGW 1111	4	Communication studies elective	4	Vacation	4		0
COMM 1101	4	Communicati studies foundation course	4	Foreign language core course	4				
ARTG 1250	4	COMM 1112 or 2301	4						
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2220 (with optional ARTF 2221)	4						
Elective	4								
		17			16			8	0
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Communication studies cluster course	4	Elective	4	Vacation	4	Co-op	0		0
Foreign language core course	4	Communicati studies elective	4						
ARTH 2210	4	Foreign language core course	4						
ARTG 2250 (with optional ARTG 2251)	4	ARTG 2252	4						
		EEAM 2000	1						
		16			17			0	0
Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op	0	Communication studies elective	4	Communication studies elective	4	Co-op	4		0
		ARTH 2215	4	Elective	4				
		ARTG 3350	4						
		ENGW 3314 or 3315	4						
		0			16			8	0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Communication studies writing-intensive	4	Vacation	0	Co-op	0
		Elective	4				
		ARTG 3451	4				
		ARTG 4550	4				
	0		16		0		0

Year 5			
Fall	Hours	Spring	Hours
Co-op	0	COMM 4602 or ARTG 4551	4
		Graphic and information design 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
ARTF 1000 or COMM 1000	1	Communication studies foundation course	4	Communication studies elective	4	Vacation	0
COMM 1101	4	ENGW 1111	4	Foreign language elective	4		
ARTG 1250	4	ARTF 2220 (with optional ARTF 2221)	4				
ARTF 1122 (with optional ARTF 1123)	4	COMM 1112 or 2301	4				
Elective	4						
	17		16		8		0

Year 2							
Fall	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					Communication studies writing-intensive	4
Elective	4						
EEAM 2000	1						

ARTG 2250 (with optional ARTG 2251)	4				
	17		0		0
					8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication studies elective	4	Co-op	0	Co-op	0	Vacation	0
Foreign language core course	4						
ARTH 2215	4						
ARTG 2252	4						
	16		0		0		0

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 or 3315	4						
ARTG 3350	4						
	16		0		0		0

Year 5			
Fall	Hours	Spring	Hours
Communication studies writing-intensive	4	COMM 4602 or ARTG 4551	4
ARTG 3451	4	Graphic and information design 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. 46).



## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	

ENGL 3720	19th-Century Major Figure
ENGL 4040	Topics in 19th-Century Literatures
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure
<b>Theories and Methods</b>	
Complete one of the following:	
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 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
<b>Comparative Literature</b>	
Complete one of the following:	
ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel

ENGL 3676	Representing Gender and Sexuality in Literature	
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**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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

**Graphic and Information Design Requirements**

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
or ENGL 1000	English at Northeastern	
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Electives</b>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	

ARTF 1124	Form and Structure (with optional ARTF 1125)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3351	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
<b>Integrative English Course</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 3340	Technologies of Text	
ARTG 4551	Design Degree Project 2	

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Two Co-ops (Summer 2/Fall)**

Year 1							
Fall	Hours	Spring	Hours	Summer	Hours	Summer	
				1		2	
ENGL 1000	1	ENGL 1160	4	Vacation		Vacation	
or		or					
ARTF 1000		1410					
ENGL 1450	4	ARTG 1122	4				
		(With optional ARTF 2251)					
ARTF 1122	4	Integrat course	4				
(with optional ARTF 2221)							
Elective	4						
		17	16	0		0	
Year 2							
Fall	Hours	Spring	Hours	Summer	Hours	Summer	
				1		2	
ARTF 2220	4	ARTH 2210	4	Vacation		Co-op	
(with optional ARTF 2221)							
ARTG 2250	4	ARTG 3451	4				
		4	4	4			

ENGL 1700	4	ENGL 19th-century requirement	4				
ENGL pre-19th century requirer	4	ENGL theories & method requirer	4				
	16		16		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		ARTG 3350	4	Vacation		Co-op	
		ARTH 2:	4				
		ENGL comparative requirement	4				
		ENGL diversity requirer	4				
	0		16		0		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			<b>Summer Full Semester</b>	<b>Hours</b>
Co-op		ARTG 3451	4			Vacation	
		Elective	4				
		ENGL 20th-century requirement	4				
		ENGL elective	4				
	0		16				0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
ARTG 4550	4	Integrative course					
ENGL 4:	4	English writing requirer	4				
Elective	4	Elective	4				
ENGL elective	4	Elective	4				
	16		12				

Total Hours: 125

## Game Art and Animation, BFA

Game art and animation offers students an opportunity to master visual arts and animation within the game medium. The program focuses on developing the depth of knowledge required to be successful in a highly competitive industry. The continuing revolution in digital computing and animation has produced a rapidly evolving field for artists who create aesthetics, characters, and environments for games. The major encourages students to think critically and work collaboratively in multidisciplinary teams. The collaborative approach helps all team members to understand the context in which their asset contributions

are used and to develop visual design skills in the service of larger experiential goals. Students have many opportunities to collaborate with their peers and work with students in the BS in computer science and game development and BFA in games majors, culminating in a two-semester senior capstone. Students will have a home college in the College of Arts, Media and Design but will have a minimum of four interdisciplinary courses where students interact and work together with students in the other degrees.

Working in the interdisciplinary game areas, the program fosters experiential learning opportunities utilizing diverse intersections of skills merging artistic practice and expression blended with technology. Focus is on establishing core skills that engage critical thinking in preparation for professional practice in game art and asset creation or moving on to advanced study. Students will have an opportunity to develop tools to succeed, eagerness to innovate, and skills to become next-generation entrepreneurs in an ever-changing games and media landscape. Practical and technical experiential training will be offered via Northeastern's world-renowned co-op program.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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
<b>Art and Design Learning Community</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Foundation</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124	Form and Structure (with optional ARTF 1125)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
ARTF 1120	Observational Drawing	4
GAME 1110	Games and Society	4
ARTH 1111	Global Art and Design History: Renaissance to Modern	4
ARTH 2212	Survey of the Still and Moving Image	4
<b>Art History Elective</b>		
Complete one of the following:		4
ARTH 1100	Interactive Media and Society	

ARTH 1110	Global Art and Design History: Ancient to Medieval
ARTH 2210	Modern Art and Design History
ARTH 2211	Contemporary Art and Design History
ARTH 2213	Nineteenth-Century Art
ARTH 2215	History of Graphic Design
ARTH 5100	Contemporary Art Theory and Criticism
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
or GAME 2355	Narrative for Games	
ARTD 2370	Animation Basics (with optional ARTD 2371)	4
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	

**Animation Courses**

Code	Title	Hours
<b>Animation</b>		
ARTD 3470	Animation 1	4
ARTD 3472	Character Design for Animation	4
ARTD 3473	Animation for Games	4
ARTD 4570	Animation 2	4
ARTD 4575	Animation 3	4

**Electives**

Complete 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: Concept + Process
ARTD 3470	Animation 1
ARTD 3480	Video: Sound and Image
ARTD 4565	Photography: Visual Strategies + Context
ARTD 4660	Studio Photography
ARTD 4661	Photography: Experimental Processes
ARTD 4577	Digital Sculpture and Model Making
ARTG 2252	Graphic Design 1
ARTG 3250	Physical Computing
ARTG 3351	Time-Based Design

*Other*

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500
PSYC 1101	Foundations of Psychology

**Capstone Requirement**

Code	Title	Hours
ARTD 4530	Media Arts Degree Project 1	4
ARTD 4670	Media Arts Degree Project 2	4

**Supporting Course**

Code	Title	Hours
MATH 1260	Math Fundamentals for Games	4

**Writing Requirement**

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

**Major Credit Requirement**

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 1			
Fall	Hours	Spring	Hours
ARTF 1000	1	ARTF 1122 (with optional ARTF 1123)	4
ARTF 1120	4	ARTF 2220 (with optional ARTF 2221)	4
ARTF 1124 (with optional ARTF 1125)	4	GAME 1110	4

GAME 2500	4 Elective (MATH 1260 suggested)	4		
ENGW 1111	4			
	17		16	
<b>Year 2</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
ARTF 2223 (with optional ARTD 2224)	4	ARTD 3473	4	
ARTD 2370 (with optional ARTD 2371)	4	ARTD 3470	4	
GAME 2355	4	ARTH 1111	4	
ARTH elective	4	Elective	4	
	16		16	
<b>Year 3</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b> <b>Hours</b>
ARTD 4570	4	Co-op		Co-op
ARTD 3472	4			
ARTH 2212	4			
Advanced Writing in the Disciplines	4			
EEAM 2000	1			
	17		0	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b> <b>Hours</b>
GAME or A + D elective	4	Co-op		Co-op
GAME or A + D elective	4			
Elective	4			
Elective	4			
	16		0	0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
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	

Total Hours: 130

## Architectural Studies and Design, BS

Students integrate the study of architecture with strategies of graphic and information design, interaction design, or experience design. A flexible curriculum focused on key contemporary topics related to the built environment is combined with a broad understanding of the

principles and systems of perception, communication, and action. Students integrate text and image to visualize concepts and data, create navigable interfaces and systems that allow audiences to take an active role to achieve meaningful goals, and take a holistic and integrative approach that focuses on the quality of the human experience in concrete situations. Successful students emerge with a strong portfolio suited to further graduate education or experience in architecture and design-related fields.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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

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

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

### Architectural Studies Courses

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



ARCH 4850 Urban and Architectural History Abroad

ARCH 5310 Design Tactics and Operations

**Design Requirements**

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition	4
<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional 2224)	

**Design Required**

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

**Design Elective**

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

**Art + Design History Elective**

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

**Art + Design Elective**

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

**Degree Capstone Project**

ARTG 4550 Design Degree Project 1 4

**Design Option**

Code	Title	Hours
Complete one of the following options:		
8		

**Interaction Design Option**

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

**Graphic and Information Design Option**

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

**Experience Design Option**

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Integrative Requirement**

Code	Title	Hours
ARTG 4550	Design Degree Project 1	

**Program Requirement**

132 total semester hours required

**Plan of Study**

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Elective	4	Vacation	0
ARCH 1310 and ARCH 1311	4	ARCH 1120	6	Elective	4		
ARTF 1122 (with optional ARTF 1123)	4	Architecture history elective	4				
ARTG 1250	4	Art + Design fundamentals elective	4				
ENGW 1111	4						
		17			18		
					8		
						0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Elective	4	Co-op	0
ARCH 2260	4	ARCH 3450	4	Elective	4		
ARTG 2250 (with optional ARTG 2251)	4	ARTG 3350	4				
Architecture elective	4	Design option 1	4				
		EEAM 2000	1				
		18			17		
					8		
						0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Architecture elective	4	Elective	4	Co-op	0
ENGW 3314 or 3315 (online)	4	Art + Design history elective	4	Elective	4		
		ARTG 3451	4				
		Design option 2	4				
		4			16		
					8		
						0	

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	Architecture elective	4
Elective (online)	4	ARTG 4550	4
		Art + Design elective	4
		Design elective	4
		4	16

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or ARCH 1000	1	ARCH 1110	4	Vacation	0	Vacation	0
ARTF 1122 (with optional ARTF 1123)	4	ARCH 1120	6				
ARTG 1250	4	Architecture history Elective	4				
ARCH 1310 and ARCH 1311	4	Art + Design fundamentals elective	4				
ENGW 1111	4						
	17		18		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 2130	6	ARCH 2340 and ARCH 2341	4	Vacation	0	Vacation	0
ARTG 2250 (with optional ARTG 2251)	4	ARCH 3450	4				
Art + Design history elective	4	Design option 1	4				
ARCH 2260	4	Design elective	4				
	18		16		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Architecture elective	4	Co-op	0	Co-op	0	Vacation	0
ARTG 3350	4						
Design option 2	4						
ENGW 3314 or 3315	4						
EEAM 2000	1						
	17		0		0		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Architecture elective	4	Co-op	0	Co-op	0	Vacation	0
ARTG 3451	4						
Elective	4						
Elective	4						
	16		0		0		0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Art + Design elective	4	ARTG 4550	4				
Elective	4	Elective	4				

Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 134

**Game Design and Music with concentration in Music Technology, BS**

The Game Design and Music combined major with a concentration in Music Technology prepares students to manage all aspects of music and sound design integral to the creative process in Game Design. Students focus on the digital sound technologies, audiovisual integration techniques and collaborative skills, grounded in real-world experience, that are necessary to apply one's musical imagination effectively in a game design environment. Also emphasized are the aesthetic, expressive, psychological and social perspectives essential to meaningful engagement across a broad range of applications in the game industry.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), and Analyzing/Using Data (AD), Interpreting Culture (IC), Natural/Designed World (ND), Difference/Diversity (DD), Writing Intensive (WI), and Capstone Experience(CE) are met through the major course requirements. All other NUpath requirements must be met through electives.

**Game Design Courses**

Code	Title	Hours
ARTF 1000	Art and Design at Northeastern	1
Game Design Required		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development and Production	4

**Game Design Electives**

Complete one of the following:

GAME 1850	Experimental Game Design	4
or GAME 3300	Game Interface Design	

**Art + Design Electives**

Complete three courses from the following: 12

Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.

## Music Requirements

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following:		8
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
MUSC 3541	Music Analysis Seminar	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<b>Contemporary</b>		
Complete one from the following:		4
MUSC 2101	Black Popular Music	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
<b>Music Technology Requirements</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 2320	Sound Design	
MUST 4610	Composition for Electronic Instruments	
MUST 3540	Special Topics in Music Technology	
MUST 4520	Interactive Music Programming	

## Integrative Requirement

Code	Title	Hours
Note: MUSC 1220 is already required in the Music Technology Requirements section		
MUST 1220	Introduction to Music Technology	
<b>Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4
GAME 4700	Game Design Capstone	4

## Combined-Major Credit Requirement

Complete 90 semester hours in the major.

## Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

128 total semester hours required

## 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through electives.

## Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000 or MATH 1000	Art and Design at Northeastern Mathematics at Northeastern	1
<b>Art and Design Fundamentals</b>		
Complete one course in the following range. ARTF 1143 is recommended.		4
ARTF 1141 to ARTF 1149		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Elective</b>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	

ARTD 2380	Video Basics (with optional ARTD 2381)
ARTG 2260	Programming Basics
ARTF 1120	Observational Drawing
ARTF 1121	Conceptual Drawing
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools
ARTF 2223	Experience and Interaction (with optional ARTF 2224 )
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )
ARTG 3351	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

### Mathematics Requirements

Code	Title	Hours
<b>Math Reasoning</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate Math</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Advanced Elective</b>		
Complete one of the following: 4		
MATH 3150	Real Analysis	
MATH 3175	Group Theory	
MATH 3560	Geometry	
<b>Mathematics Elective</b>		
MATH 4025 can count as an upper-level math elective as well as a capstone.		
Complete one course in the following range: 4		
MATH 3101 to MATH 4899		

### Integrative Requirement

Code	Title	Hours
ARTG 3451	Information Design 1	4

### Combined-Major Credit Requirement

Complete 80 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample 5-Year Plan of Study , 2 Co-op

Year 1					
Fall	Hours	Spring	Hours		
ARTF 1000	1	MATH 1342	4		
ARTF 1143	4	ARTF 1122 (with optional ARTF 1123)	4		
MATH 1365	4	ARTG 1250	4		
MATH 1341	4	ARTH 2210	4		
ENGW 1111	4				
			17	16	
Year 2					
Fall	Hours	Spring	Hours		
MATH 2321	4	MATH 2341	4		
ARTG 2250	4	ARTG 2252	4		
ARTH 2215	4	Math elective	4		
Elective	4	Elective	4		
			16	16	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2331	4	Co-op		Co-op	
ARTG 3350	4				
Elective	4				
Elective	4				
EEAM 2000	1				
			17	0	0
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 3081	4	Co-op		Co-op	
ARTG 3451	4				
Elective	4				
Elective	4				
			16	0	0
Year 5					
Fall	Hours	Spring	Hours		
ARTG 4550	4	Capstone	4		
Art and Design Elective	4	Elective	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
			16	16	

Total Hours: 130

### 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. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUPath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUPath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Introduction to College

Code	Title	Hours
JRNL 1000 or ARTF 1000	Journalism at Northeastern Art and Design at Northeastern	1

## Journalism Major Requirements

Code	Title	Hours
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### Journalism Introductory Course

JRNL 1150	Understanding Today's News	4
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### Journalism Foundations

Must receive a C or better in the following:

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

### Law and Ethics

JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
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### Journalism Electives

Take three JRNL courses		12
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## Art and Design Core

Code	Title	Hours
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### Art and Design Fundamentals

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

### Art and 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

## Design Requirements

Code	Title	Hours
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### 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 the following: 8

ARTG 4550	Design Degree Project 1
ARTG 4700	Interaction Team Degree Project 1

## Design Elective

Code	Title	Hours
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Complete one of the following: 4

ARTD 2360	Introduction to Photography (with optional ARTD 2361)
ARTD 2380	Video Basics (with optional ARTD 2381)
ARTF 1120	Observational Drawing
ARTF 1121	Conceptual Drawing
ARTF 1124	Form and Structure (with optional ARTF 1125)
ARTF 2220	Movement and Time (with optional ARTF 2221)
ARTG 2252	Graphic Design 1
ARTG 3250	Physical Computing
ARTG 3450	Graphic Design 2
ARTG 3460	Identity and Brand Design
ARTG 4552	Information Design 2
ARTG 4553	Environmental Information Design
ARTG 4554	Typography 3

## Integrative Requirements

Code	Title	Hours
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JRNL 5311	Design for Storytelling	4
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Complete one of the following: 4

ARTG 4551 or ARTG 4701	Design Degree Project 2 Interaction Team Degree Project 2
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## Program Requirement

131 total semester hours required



## Plan of Study

### Sample Five Years, Three Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000 or ARTF 1000	1	JRNL 1101 and JRNL 1102	5	Elective	4	Vacation	
JRNL 1150	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4		
ENGW 1111	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4	Elective	4				
ARTF 1122 (with optional ARTF 1123)	4						
		17	17	8	0		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2201	4	Co-op 1	4	Co-op 1	4	Vacation	
EEAM 2000	1						
Art + design history elective 1	4						
ARTG 2260	4						
Elective	4						
		17	0	0	0		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2301	4	Co-op 2	4	Co-op 2	4	Elective	4
Journalism elective 1	4					ENGW 3302	4
ARTG 2400 (with optional ARTG 2401)	4						
ARTG 3350	4						
		16	0	0	8		

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3610	4	Co-op 3	4	Co-op 3	4	Vacation	0
Journalism elective 2	4						
Art + design history elective 2	4						
ARTG 3700	4						
		16	0	0	0		

#### Year 5

Fall	Hours	Spring	Hours
JRNL 5311	4	Journalism elective 3	4

JRNL 3550 or 4650	4	ARTG 4551 or 4701	4
ARTG 3451	4	Art + design elective	4
ARTG 4550 or 4700	4	Elective	4
		16	16

Total Hours: 131

### Sample Five Years, Three Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000 or ARTF 1000	1	JRNL 1101 and JRNL 1102	5	Vacation	4	Vacation	
JRNL 1150	4	ARTF 2223 (with optional ARTF 2224)	4				
ENGW 1111	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4	Elective	4				
ARTF 1122 (with optional ARTF 1123)	4						
		17	17	0	0		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2201	4	JRNL 2301	4	Vacation	4	Vacation	
EEAM 2000	1	Journalism elective 1	4				
Art + design history elective 1	4	ARTG 2400 (with optional ARTG 2401)	4				
ARTG 2260	4	ARTG 3350	4				
Elective	4						
		17	16	0	0		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3610	4	Co-op 1	4	Co-op 1	4		
Journalism elective 2	4						
Art + design elective	4						
ARTG 3700	4						
		16	0	0	0		

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3550 or 4650	4	Co-op 2	4	Co-op 2	4		
Art + design history elective 2	4						
Elective	4						

ENGW 3302	4		
	16	0	0
<b>Year 5</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
JRNL 5311	4	Journalism elective 3	4
ARTG 3451	4	ARTG 4551 or 4701	4
ARTG 4550 or 4700	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 131

## Media and Screen Studies and Media Arts, BA

The Media and Screen Studies Program and the Department of Art + Design offer a combined major in media studies and media arts. Students pursuing the combined major are able to integrate the theory and practice of contemporary media studies with the deep appreciation of the narrative arts that is required for professional work in documentary film, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated films.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320 or MSCR 1420	Media and Social Change Media History	4

<b>Foundation Course</b>		Hours
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		Hours
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		Hours
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
Recommendation: Complete MSCR 4623 as one of your MSCR electives to fulfill NUpath capstone.		
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Media Arts Courses

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional 2221)	4
<b>Drawing Fundamentals</b>		
ARTF 1120 or ARTF 1121	Observational Drawing Conceptual Drawing	4
<b>Art + Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2212	Survey of the Still and Moving Image	4
<b>Media Arts Basics Electives</b>		
Complete two of the following sets:		8
ARTD 2360	Introduction to Photography	
ARTD 2370	Animation Basics	
ARTD 2380	Video Basics	
<b>Media Arts Capstone</b>		

ARTD 4530 Media Arts Degree Project 1 4

**Art + Design Electives**

Complete any two courses not previously completed in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or corequisites have been met. 8-9

**Integrative Course**

Code	Title	Hours
MSCR 3600	Film Theory	4

**Media and Screen Studies Grade Requirement**

No more than two grades below a C in media and screen studies courses may be used to fulfill degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**SAMPLE FOUR YEARS, TWO CO-OPS**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective	4
MSCR 1220	4	ARTH 2212	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 1120 or 1121	4				
ARTF 2220 (with optional 2221)	4	Elective	4				
ENGW 1111	4						
	17		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR foundation	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
Media arts basics elective	4						
ARTH 2210	4						
EEAM 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR writing-intensive	4					Elective	4
Media arts basics elective	4						

Art + design elective	Hours	Spring	Hours
	4		
	16	0	0
<b>Year 4</b>			
Fall	Hours	Spring	Hours
MSCR 3600	4	ARTD 4530	4
MSCR writing-intensive	4	MSCR elective	4
Art + design elective	4	MSCR elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**Media Arts and Communication Studies, BA**

The Department of Communication Studies and the Department of Art + Design offer a combined major in media arts and communication studies. Students interested in the combined major integrate the study of communication skills and processes with the study of the creation of the narrative arts, required for professional work in documentary film, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated films.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath attributes Creative Expression and Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

In order to graduate, students must complete Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) in their electives.

**Media Arts Courses**

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Foundations</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4

ARTF 2220 Movement and Time (with optional ARTF 2221 ) 4

**Drawing Fundamentals**

ARTF 1120 Observational Drawing 4  
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

**Degree Project**

ARTD 4530 Media Arts Degree Project 1 4

**Media Art Basics Electives**

Complete two of the following: 8

ARTD 2360 Introduction to Photography  
ARTD 2370 Animation Basics  
ARTD 2380 Video Basics

**Art and Design Electives**

Complete any two courses not previously taken in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or co-requisites have been met. 8-9

**Communication Studies Courses**

Code	Title	Hours
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**Communication Studies Common Requirements**

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following: 4

COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

**Cluster Course**

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

**Writing-Intensive Courses**

Complete two of the following: 8

COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 COMM courses. 12

**Integrative Requirement**

Code	Title	Hours
COMM 3415	Communication Criticism	4

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or COMM 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Communication studies elective	4	Communication studies elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTH 2212	4	Elective	4	Elective	4
ARTH 2210	4	COMM 1112 or 2301	4				
COMM 1101	4	Drawing elective	4				
ENGW 1111	4						
		17		16		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Media arts basics elective	4	Co-op		Co-op		Communication studies elective	4
Communication studies cluster	4					Elective	4
Communication studies foundation	4						
Communication studies writing-intensive	4						
EEAM 2000	1						
		17		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Media arts basics elective	4	Co-op		Co-op		Foreign Language	4

Communicati studies writing-intensive	4	Elective	4
Art + design elective	4		
Art + design elective	4		

16		0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
ARTD 4530	4	Foreign Language	4	
COMM 3415	4	Elective	4	
Foreign Language	4	Elective	4	
Elective	4	Elective	4	
16		16		

Total Hours: 130

## Theatre and Interaction Design, BA

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Theatre Requirements

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

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4

THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

### Major Elective

Complete one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

### Intermediate/Advanced Electives

Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2300	Classics of Global Theatre	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

### Interaction Design Requirements

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition	4
ARTF 2223	Experience and Interaction	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250 and ARTG 2251	Typography 1 and Type Tools	5
ARTG 2260	Programming Basics	4
ARTG 2400 and ARTG 2401	Interaction Design 1: Responsive and Interaction Design Tools	5



ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Design Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Major Electives</b>		
<i>Art + Design History</i>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	
<i>Art + Design Elective</i>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography	
ARTD 2380	Video Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3460	Identity and Brand Design	
ARTG 3351	Time-Based Design	
ARTG 4552	Information Design 2	
ARTG 4553	Environmental Information Design	
ARTG 4554	Typography 3	

**Integrative Requirement**

Code	Title	Hours
Note: ARTG 4550 double counts with the specified requirements above.		
ARTG 4550	Design Degree Project 1	4
THTR 4702	Capstone Rehearsal and Performance	4

**Theatre and Interaction Design Combined Major Credit Requirement**

Complete 96 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4	Elective	4
THTR 1120	4	THTR 1131	4	Elective	4	Elective	4
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4				

ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4
ARTG 1250	4		
		17	16
			8
8			

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Co-op 1		Co-op 1		Elective	4
Art + design history elective 1	4					Elective	4
THTR 2000	1						
THTR 1270	4						
ARTG 2260	4						
THTR 2325	4						
		18	0	0			8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2		Elective	4
ARTG 3350	4					Elective	4
Art + design elective 1	4						
THTR elective	4						
		16	0	0			8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Art + design history elective 2	4	THTR 4702	4	Vacation		Vacation	0
THTR elective	4	THTR advanced technique	4				
ARTG 3700	4	ARTG 3451	4				
ARTG 4550 or 4700	4	Elective	4				
THTR 4100	1						
		17	16	0			0

Total Hours: 132

**Theatre and Interaction Design, BS**

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

## Theatre Requirements

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

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Major Electives</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate/Advanced Electives</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2300	Classics of Global Theatre	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	

THTR 3200	Queer Theatre and Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3—Playing Shakespeare
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2

## Interaction Design Requirements

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition	4
ARTF 2223	Experience and Interaction	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250 and ARTG 2251	Typography 1 and Type Tools	5
ARTG 2260	Programming Basics	4
ARTG 2400 and ARTG 2401	Interaction Design 1: Responsive and Interaction Design Tools	5
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Design Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Major Electives</b>		
<i>Art + Design History</i>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	
<i>Art + Design Elective</i>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography	
ARTD 2380	Video Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3460	Identity and Brand Design	
ARTG 3351	Time-Based Design	
ARTG 4552	Information Design 2	
ARTG 4553	Environmental Information Design	
ARTG 4554	Typography 3	

## Integrative Requirement

Code	Title	Hours
Note: ARTG 4550 double counts with the specified requirements above.		

ARTG 4550	Design Degree Project 1	4
THTR 4702	Capstone Rehearsal and Performance	4

### Theatre and Interaction Design Combined Major Credit Requirement

Complete 96 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4	Elective	4
THTR 1120	4	THTR 1131	4	Elective	4	Elective	4
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4				
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4						
		17	16	8	8		

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Co-op 1		Co-op 1		Elective	4
Art + design history elective 1	4					Elective	4
THTR 2000	1						
THTR 1270	4						
ARTG 2260	4						
THTR 2325	4						
		18	0	0	8		

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2		Elective	4
ARTG 3350	4					Elective	4
Art + design elective 1	4						
THTR elective	4						
		16	0	0	8		

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Art + design history elective 2	4	THTR 4702	4	Vacation		Vacation	0

THTR elective	4	THTR advanced technique	4		
ARTG 3700	4	ARTG 3451	4		
ARTG 4550 or 4700	4	Elective	4		
THTR 4100	1				
		17	16	0	0

Total Hours: 132

### Mechanical Engineering and Design, BSME

The combined major in mechanical engineering and design is designed to educate students in topics of both disciplines and the interface between them. Mechanical engineering involves the design, development, and manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Its current practice has been heavily influenced by recent advances in computer hardware and software. Today, engineers also play a primary role in the development of new technologies in a variety of fields—energy conversion, solar energy utilization, environmental control, prosthetics, transportation, manufacturing, and new-materials development. Design is the discipline that shapes human experiences in specific situations to improve quality. Designers pose important questions about—and provide significant answers to how we live. Designers are needed when we don't know what is needed as well as when we think we do. Students in this program will combine the disciplines in order to address complex problems with human-centered solutions.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Engineering Requirements

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4

ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
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**Senior Capstone Design Project**

MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

**Technical Electives**

Complete three of the following: 12

ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	
ME 4555	System Analysis and Control	
ME 4570	Thermal Systems Analysis and Design	

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2	
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**Supporting Courses: Mathematics/Science**

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	
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**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000 or ARTF 1000	Introduction to the Study of Engineering Art and Design at Northeastern	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	
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**Design Requirements**

Code	Title	Hours
ARTF 1122	Color and Composition	4

**Complete one of the following:** 4

ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure	
ARTF 2220	Movement and Time	
ARTF 2223	Experience and Interaction	

**Design Requirements**

ARTG 1250	Design Process Context and Systems	4
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ARTG 2250	Typography 1	4
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Complete one of the following design options: 8

*Interactive Design Option*

ARTG 2400	Interaction Design 1: Responsive	
ARTG 3700	Interaction Design 2: Mobile	

*Graphic and Information Design Option*

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

*Experience Design Option*

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Art + Design Electives**

*Art + Design History Elective* 4

Complete any ARTH course. Recommend selecting an ARTH course that fulfills both NUpath IC and SI.

*Design Elective* 8

Complete two ARTG courses (at least one at 3xxx-level or higher).

*Art + Design Elective* 4

Complete any one ARTG, ARTE, ARTD, ARTH, ARTS course.

**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required in each course:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 4 semester hours of academic, nonremedial, nonrepetitive courses. Recommend selecting a course to fulfill NUpath DD.		
		4

**Integrative Courses**

Code	Title	Hours
MEIE 4702	Capstone Design 2	

This course is already required above and also fulfills the integrative requirement.

**Program Requirement**

143 total semester hours required

**Plan of Study**

**Sample 4 Years, Two Co-ops Curriculum Outline (Co-op in Summer 2/Fall)**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have AP credit for Calc.AB (MATH 1341, Calculus 1)	4	MATH 2321	4	ME 2350	4	Vacation	0
MATH 1342	4	PHYS 1151 and PHYS 1152 and PHYS 1153	5	Art + Design fundamental	4		
CHEM 1151 and CHEM 1153	4	GE 1502	4				
ARTF 1000 or GE 1000	1	ARTF 1122	4				
GE 1501	4						
ENGW 1111	4						
	21		17		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2341	4	ME 2355 and ME 2356	5	ME 3475 or 3480	4	Co-op	0
PHYS 1155 and PHYS 1156 and PHYS 1157	5	ME 2380 and ME 2381	4	ARTG 2250	4		
ME 2340 and ME 2341	5	ME 3455 and ME 3456	5				
ARTG 1250	4	ENCP 2000	1				
		Design option 1	4				
	18		19		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ME 4505 and ME 4506	5	MEIE 4701	1	Co-op	0
ENGW 3302 or 3315 (to be taken online)	4	Engineering tech elective 1	4	Engineering tech elective 2	4		
		Design option 2	4	Art + Design elective	4		

Art + Design history elective	4			
ENCP 3000	1			
	4	18	9	0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	MEIE 4702	5
General elective (NUpath DD)	4	Engineering tech elective 3	4
		Design elective 1	4
		Design elective 2	4
	4		17

Total Hours: 143

**Sample Five Years, Three Co-ops Curriculum Outline (Co-op in Summer 2/Fall)**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have AP credit for Calc.AB (MATH 1341, Calculus 1)	4	MATH 2321	4	Vacation	0	Vacation	0
MATH 1342	4	PHYS 1151 and PHYS 1152 and PHYS 1153	5				
CHEM 1151 and CHEM 1153	4	GE 1502	4				
ARTF 1000 or GE 1000	1	ARTF 1122	4				
GE 1501	4						
ENGW 1111	4						
	21		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1155 and PHYS 1156 and PHYS 1157	5	ENCP 2000	1	Vacation	0	Co-op	0
ME 2350	4	MATH 2341	4				
ARTG 1250	4	ME 2340 and ME 2341	5				
General elective (NUpath DD)	4	ME 2380 and ME 2381	4				
		Art + Design fundamental	4				
	17		18		0		0



**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ME 2355 and ME 2356	5	ME 3475 or 3480	4	Co-op	0
		ME 3455 and ME 3456	5	ARTG 2250	4		
		ENGW 3302 or 3315	4				
		Design option 1	4				
		ENCP 3000	1				
	0		19		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ME 4505 and ME 4506	5	MEIE 4701	1	Co-op	0
		Engineering tech elective 1	4	Engineering tech elective 2	4		
		Design option 2	4	Art + Design elective	4		
		Art + Design history elective	4				
	0		17		9		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	MEIE 4702	5
		Engineering tech elective 3	4
		Design elective 1	4
		Design elective 2	4
	0		17

Total Hours: 143

**Animation, Minor**

The animation minor immerses students in the creation of animated artwork and assets for short animated films, game art and promotion, documentary films, visualization, motion graphics, illustration, and interactive art. An intensive studio program, this curriculum seeks to immerse students in the knowledge, experience, and techniques of animation, informed by theory, experimentation, and critique. Extensive digital imaging and interactive media editing and production facilities afford students the opportunity to become proficient in the emerging practices necessary for remarkable work.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

**Requirements for Non-Art and Design Majors**

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
ARTD 2370	Animation Basics (with optional ARTD 2371 )	4
ARTD 3470	Animation 1	4

**Requirements for Art and Design Majors**

*Note:* This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTD 2370	Animation Basics (with optional ARTD 2371 )	4
ARTD 3470	Animation 1	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 2100	Narrative Basics	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	
ARTD 4577	Digital Sculpture and Model Making	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	
ARTH 2212	Survey of the Still and Moving Image	

**GPA Requirement**

2.500 GPA required in the minor

**Art, Minor**

The art minor allows students to complement any degree with a broad exploration of visual studies, fine arts, and design. Following an introduction to the fundamentals of drawing and two-dimensional design, students select from courses in time-based media, interaction, sculpture, painting, and art history. The department's exceptional Dialogues are popular among art minors, who are able to complete a large portion of their course work during culturally immersive and focused studio residencies in places such as Ireland, Iceland, Cuba, and the Galapagos Islands.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses

and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
<b>Elective Courses</b>		
Complete three of the following:		12
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (and ARTF 1125 )	
ARTF 2220	Movement and Time (with optional ARTF 2221 )	
ARTF 2223	Experience and Interaction (with optional ARTF 2224 )	
ARTS 2330	Sculpture Basics	
ARTS 2340	Painting Basics	
ARTS 2341	Figure Drawing	
ARTS 3449	Drawing in Mixed Media	
ARTE 2301	The Graphic Novel	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 2501	Art and Design Abroad: History	
ARTE 3901	Art and Design Special Topics	
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	
ARTD 2370	Animation Basics (with optional ARTD 2371 )	
ARTD 2380	Video Basics (with optional ARTD 2381 )	
ARTH 1110	Global Art and Design History: Ancient to Medieval	
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2212	Survey of the Still and Moving Image	

### Requirements for Art and Design Majors

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

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
<b>Elective Courses</b>		
Complete three of the following:		12
ARTS 2330	Sculpture Basics	
ARTS 2340	Painting Basics	
ARTS 2341	Figure Drawing	

ARTS 3449	Drawing in Mixed Media
ARTE 2301	The Graphic Novel
ARTE 2500	Art and Design Abroad: Studio
ARTE 2501	Art and Design Abroad: History
ARTE 3901	Art and Design Special Topics
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )
ARTD 2370	Animation Basics (with optional ARTD 2371 )
ARTD 2380	Video Basics (with optional ARTD 2381 )
ARTH 1110	Global Art and Design History: Ancient to Medieval
ARTH 1111	Global Art and Design History: Renaissance to Modern
ARTH 1400	The Science of Art, the Art of Science
ARTH 2210	Modern Art and Design History
ARTH 2211	Contemporary Art and Design History
ARTH 2212	Survey of the Still and Moving Image

### GPA Requirement

2.500 GPA required in the minor

### Art History, Minor

An ideal complement to many majors, the art history minor builds the techniques of visual intelligence necessary to successfully navigate an increasingly image-driven world. Students learn to interpret visual evidence as well as written documents to understand and interrogate how evolving ideas about quality and judgment have shaped the institutions of art, including the growing art market. A diverse and strong faculty brings its own research into the classroom, allowing students to gain international exposure and real-world experience with world-class museums and cultural centers in Boston, Cambridge, and the greater metropolitan area. Art history minors often have opportunities to conduct independent research, develop publishable texts, and gain exposure to the dynamic fields of visual art and curatorial practice.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

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

### Requirements

Code	Title	Hours
<b>Required Courses</b>		
Complete five of the following:		20
ARTH 1100	Interactive Media and Society	
ARTH 1110	Global Art and Design History: Ancient to Medieval	

ARTH 1111	Global Art and Design History: Renaissance to Modern
ARTH 1400	The Science of Art, the Art of Science
ARTH 2210	Modern Art and Design History
ARTH 2211	Contemporary Art and Design History
ARTH 2212	Survey of the Still and Moving Image
ARTH 2213	Nineteenth-Century Art
ARTH 2215	History of Graphic Design
ARTH 5100	Contemporary Art Theory and Criticism
ARTH 5200	Issues in Contemporary Art
ARTH 5400	Contemporary Visual Culture
ARTH 5902	Special Topics in Art and Design History
ARTE 2501	Art and Design Abroad: History

### GPA Requirement

2.500 GPA required in the minor

### Creative Fabrication, Minor

The creative fabrication minor is comprised of a suite of courses that introduces the student to studio principles and practices that will inform the creative, intuitive, and critical processes that are vital when realizing ideas into physical material form. The minor is designed to train and prepare the student with a skill set of traditional and emerging tools and methods for inventing, fabricating, constructing, shaping, and prototyping innovative work in a wide range of materials for a variety of products, places, and purposes. This minor offers the challenge of creating a project that demonstrates and tests the student's competence with the making of artifacts that align with the intentions and aspirations of the maker.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Required

Code	Title	Hours
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5

### Electives

Code	Title	Hours
Complete four courses; two courses must be taken in the same department.		16

#### Art + Design

ARTS 2330	Sculpture Basics
ARTE 3901	Art and Design Special Topics
ARTG 3250	Physical Computing
ARTD 4577	Digital Sculpture and Model Making

#### Theatre

THTR 1270	Introduction to Theatrical Design
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THTR 1131	Technical Theatre 1
THTR 2400	Scenic Design
THTR 2385	Fashion Construction and Pattern Making
<i>Architecture</i>	
ARCH 1110 and ARCH 1120	Fundamental Architectural Representation and Fundamental Architectural Design
ARCH 2240	Architectonic Systems
ARCH 3450	Advanced Architectural Communication
<i>Engineering</i>	
GE 1501	Cornerstone of Engineering 1
GE 1502	Cornerstone of Engineering 2
GE 2300	Engineering Structure and Function: Principles of Design in Nature
GE 5030	Iterative Product Prototyping for Engineers

### GPA Requirement

2.000 GPA required

### Experience Design, Minor

Experience design is a holistic approach that utilizes investigation into human environments in specific situations to improve quality. Given an understanding of goals, needs, and desires, it seeks to improve the various contexts by identifying and studying events and how they can be turned into beneficial practices.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000-level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required</b>		
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
ARTG 1250	Design Process Context and Systems	4
ARTG 3462	Experience Design 1	4
<b>Electives</b>		
Complete two of the following:		8-9
ARTD 2100	Narrative Basics	8
ARTE 3901	Art and Design Special Topics	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 2260	Programming Basics	
ARTG 3250	Physical Computing	
ARTG 3463	Experience Design 2	
GE 1501	Cornerstone of Engineering 1	

GE 1502	Cornerstone of Engineering 2
IE 2310 and IE 2311	Introduction to Industrial Engineering and Recitation for IE 2310

ARTD 2370	Animation Basics (with optional ARTD 2371)	4
ARTD 3470	Animation 1	4

### Requirements for Art and Design Majors

Note: This minor is not open to students pursuing the BFA in design program or any design combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 3462	Experience Design 1	4
ARTG 3463	Experience Design 2	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 2100	Narrative Basics	
ARTE 3901	Art and Design Special Topics	
ARTG 2260	Programming Basics	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )	
ARTG 3250	Physical Computing	

### GPA Requirement

2.500 GPA required in the minor

#### Game Art, Minor

The game art minor offers students an opportunity to become immersed in the study and practice of the visual arts and animation within the game medium. Students are afforded the opportunity to think critically and work collaboratively in multidisciplinary teams to produce art and animation assets that are critical to the success of projects in the game medium. Working in the interdisciplinary game areas, the program fosters experiential learning opportunities utilizing diverse intersections of skills merging artistic practice and expression blended with technology. Students will be immersed in experiences to develop tools to succeed, eagerness to innovate, and skills to become next-generation entrepreneurs in the ever-changing games and media landscape.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art + Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4

### Requirements for Art and Design Majors

Note: This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1120	Observational Drawing	4
ARTD 2370	Animation Basics (with optional ARTD 2371)	4
ARTD 3470	Animation 1	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 2100	Narrative Basics	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 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 students in the game design major, as well as the combined majors in game art and animation and computer science and game development. Students make games and create portfolio pieces. Students will also be encouraged to apply principles from their own discipline to the game designs they create.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements

Code	Title	Hours
<b>Required Courses</b>		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
<b>Elective Courses</b>		
Complete two of the following:		8
GAME 3700	Rapid Idea Prototyping for Games	

GAME 3800	Game Concept Development and Production
ARTG 2260	Programming Basics

### GPA Requirement

2.000 GPA required in the minor

### Graphic and Information Design, Minor

Graphic design makes messages and meaning using visual form and the integration of text and image. It often has a persuasive intention and uses rules of visual composition, form, and pattern to enable storytelling or to create attention and an ambience for consideration. Information design focuses on visualizing concepts and data to enhance human understanding of complex and vital knowledge.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000-level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
<b>Electives</b>		
Complete two of the following:		8
ARTE 3901	Art and Design Special Topics	
ARTF 2220	Movement and Time (with optional ARTF 2221 )	
ARTH 2215	History of Graphic Design	
ARTG 2252	Graphic Design 1	
ARTG 3350	Typography 2	
ARTG 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	Title	Hours
<b>Required Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
<b>Electives</b>		
Complete three of the following:		12
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	

ARTG 3350	Typography 2
ARTG 3351	Time-Based Design
ARTG 3450	Graphic Design 2
ARTG 3460	Identity and Brand Design
ARTG 4554	Typography 3
ARTG 4555	Graphic Design Synthesis
ARTH 2215	History of Graphic Design
ARTE 3901	Art and Design Special Topics

### GPA Requirement

2.500 GPA required in the minor

### Immersive Media, Minor

This is an interdisciplinary minor that provides a foundation in the design and development of immersive experiences in the exploration of human connection and interaction through media and technology. Focusing on the core principles, tools, and techniques of immersive media development, students have an opportunity to learn to tell stories, prototype new worlds, and explore creative workflows that will help shape the future of design.

The minor serves students who are interested in the following areas: human-computer interaction, enhanced realities, virtual reality, augmented reality, augmented virtuality, extended reality, and cross reality.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### COURSES

Some of the courses for the minor require prerequisites not listed here.

Code	Title	Hours
<b>Required</b>		
<i>Extended Realities</i>		
ARTD 2000	Introduction to Immersive Media	4
Complete after all required and elective courses:		
ARTG 3100	Physical and Digital Fabrication	4
<b>Electives</b>		
<i>Object-Oriented Programming Elective</i>		
Complete one from the following list:		4
ARTG 2260	Programming Basics	
CS 2510	Fundamentals of Computer Science 2	
EECE 2560	Fundamentals of Engineering Algorithms	
MUST 3540	Special Topics in Music Technology	
PHYS 1211	Computational Problem Solving in Physics	
<i>Extended Realities Electives</i>		
Complete two of the following:		8



<i>Content Creation</i>	
ARTD 2370	Animation Basics (with optional ARTD 2371)
ARTD 3470	Animation 1
ARTD 3471	Virtual Environment Design
ARTD 3473	Animation for Games
CS 1100	Computer Science and Its Applications
CS 3540	Game Programming
GAME 2950	Game Studio
GAME 3700	Rapid Idea Prototyping for Games
GE 1111	Engineering Problem Solving and Computation
GE 1501	Cornerstone of Engineering 1
GE 2300	Engineering Structure and Function: Principles of Design in Nature
GE 2500	Design Analysis and Innovation
IS 1500	Introduction to Web Development

<i>Narrative Development</i>	
ARTD 2100	Narrative Basics
ARTE 2301	The Graphic Novel
GAME 2355	Narrative for Games
JRNL 1101	Journalism 1: Fundamentals of Reporting
JRNL 3610	Digital Storytelling and Social Media
JRNL 3630	Magazine Writing
JRNL 3370	Podcast and Radio Journalism
MSCR 2160	Narrative Filmmaking

<i>Business and Innovation</i>	
Only one course may be taken from this area:	
ENTR 2301	Innovation!
ENTR 3330	Lean Design and Rapid Prototyping
MISM 3501	Information Visualization for Business
MKTG 4502	Managing Customer Engagement in a Service World
MKTG 4508	Digital Marketing

### GPA Requirement

2.500 GPA required in the minor

### Interaction Design, Minor

Interaction design focuses on the creation of navigable interfaces and systems that allow audiences to achieve meaningful goals, connecting people to people and people to information and environments.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000-level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art and Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 2223	Experience and Interaction (with optional ARTF 2224 )	4
ARTG 1250	Design Process Context and Systems	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )	4
Choose one of the programming courses with lab course:		
ARTG 2260	Programming Basics	4
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	4
<b>Elective</b>		
Complete one of the following:		
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
ARTG 2252	Graphic Design 1	4
ARTG 3462	Experience Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4

### Requirements for Art and Design Majors

Note: This minor is not open to students pursuing the BFA in design program or any design combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251 )	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )	4
<b>Electives</b>		
Complete two of the following:		
ARTE 3901	Art and Design Special Topics	4
ARTG 2260	Programming Basics	4
ARTG 3462	Experience Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4

### GPA Requirement

2.500 GPA required in the minor

### Photography, Minor

The photography minor immerses students in the creation of photographs. The curriculum seeks to involve students in the knowledge, experience, and techniques of photography, informed by theory, experimentation, and critique. Digital imaging, editing, and production facilities afford students the opportunity to become proficient in the emerging practices necessary for a variety of creative and technical contexts.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Students who wish to register for 2000-level courses

and above need to plan ahead in order to complete prerequisite course(s) ahead of time.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art + Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123 )	4
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	4
ARTD 3460	Photography: Concept + Process	4
<b>Elective Courses</b>		
Complete two of the following:		8
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTH 2212	Survey of the Still and Moving Image	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	

### Requirements for Art + Design Majors

*Note:* This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	4
ARTD 3460	Photography: Concept + Process	4
ARTD 4565	Photography: Visual Strategies + Context	4
<b>Elective Courses</b>		
Complete two of the following:		8
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	
ARTH 2212	Survey of the Still and Moving Image	
ARTE 2500	Art and Design Abroad: Studio	
ARTE 3901	Art and Design Special Topics	
ARTE 4901	Special Topics in Art and Design Studio	

### GPA Requirement

2.500 GPA required in the minor

## Photojournalism, Minor

As our society continues to move toward a world of technology, the power of photos become that much more important. This minor will engage students on how to visually tell a compelling story. It will give students the skill sets needed to succeed in that endeavor.

### Minor Requirements

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

*Note:* A student pursuing the minor in Photojournalism must complete a minimum of three (3) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Required Courses

Code	Title	Hours
<b>Photography Foundation</b>		
Complete one of the following:		4
ARTE 2500	Art and Design Abroad: Studio	
ARTD 2360	Introduction to Photography (with optional ARTD 2361 )	
ARTD 2350	Photo Basics for Nonmajors	
<b>Photography Requirement</b>		
ARTD 3460	Photography: Concept + Process	4
<b>Integrative</b>		
JRNL 5310	Photojournalism	4
<b>Electives</b>		
Complete one of the following:		4
JRNL 2301	Visual Storytelling in Journalism	
JRNL 5314	Video News Reporting and Producing	

### GPA Requirement

2.000 GPA required in the minor

## Video Arts, Minor

The video arts minor is based on a multidisciplinary field focused on creative video expression and messaging. It weaves together collaborative frameworks, theories of social and cultural change, and video production (sound and image) alongside cinematic language (including documentary, imaginative, narrative, and experimental strategies). The scope of the video arts minor is a broader and more diverse tapestry than traditional video arts, and it reflects the dynamic evolution of video in multiple contexts, including the workplace. This minor enables students to explore contemporary, alternative, and other artistic means of video production in a variety of creative and technical contexts.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Any prerequisites should be taken before registering for 2000 level courses and above.

A student pursuing this minor must complete a minimum of four (4) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

### Requirements for Non-Art + Design Majors

Code	Title	Hours
<b>Required Courses</b>		
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
ARTD 2380	Video Basics (with optional ARTD 2381 )	4

ARTD 3480	Video: Sound and Image	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 3485	Experimental Video	
ARTD 5582	Collaborative Video and Community 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	

## Requirements for Art + Design Majors

*Note:* This minor is not available to students in the BFA in media arts program or any media arts combined major.

Code	Title	Hours
<b>Required Courses</b>		
ARTD 2380	Video Basics (with optional ARTD 2381 )	4
ARTD 3480	Video: Sound and Image	4
ARTD 3485	Experimental Video	4
<b>Electives</b>		
Complete two of the following:		8
ARTD 5582	Collaborative Video and Community 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/communication-studies/>)

**Dale A. Herbeck, PhD**  
Professor and Chair

212A Lake Hall  
617.373.5517  
617.373.8533 (fax)

The Department of Communication Studies is committed to providing students with both the communication skills and the understanding of the communication process required to thrive in a complex and changing society. Majors are required to demonstrate a mastery of the fundamentals of effective communication, to learn the fundamentals of communication theory and practice, and to develop a distinct area of emphasis. Some of the more popular areas include argumentation and advocacy, organizational and health communication, international and intercultural communication, digital communication and social media, and media production. The curriculum is designed to enhance the understanding of human communication in a variety of contexts, to empower students to become informed and engaged citizens, and to provide the knowledge and skills required to live a rich personal and professional life.

## Media and Screen Studies

Website (<https://camd.northeastern.edu/program/media-and-screen-studies/>)

**Dale A. Herbeck, PhD**  
Professor and Chair

212A Lake Hall  
617.373.5517  
617.373.8533 (fax)  
[mscr@northeastern.edu](mailto:mscr@northeastern.edu)

Media and screen studies (MSCR) educates students in the analysis and production of media. Taught from a liberal arts perspective, a media and screen studies degree seeks to give students the ability to think critically about the continually changing media industry and the complex world in which it exists and to apply that knowledge to media production. MSCR is a challenging degree that is not limited to what is traditionally offered at a film school or in a visual and performing arts degree. It gives students the tools to become engaged citizens equipped to meet the challenges of living in a global culture defined by technological and social change.

The Bachelor of Arts in Media and Screen Studies offers courses in analysis and practice. Required courses offer students an opportunity to obtain the critical thinking skills necessary to better understand media content, media technology, and media production. Students then decide how many production and analysis courses they want to take. Choosing from a broad range of electives, students can take more than half their major in media and film production courses, can take a majority of courses that critically examine media content and technology, or can combine courses in other ways.

Students may also enroll in one of the preexistent MSCR combined majors. Media and screen studies has combined majors with communication studies, English, journalism, political science, sociology, and theatre. Students may also petition for new combinations, making use of the half-major template in media and screen studies.

## Academic Progression Standards

Departmental probation will result from a cumulative grade-point average below 2.000. No more than two grades below a C in media and screen studies courses can be used to fulfill degree requirements. Dismissal from the major may occur as a result of two consecutive semesters on departmental probation.

## Programs

### Bachelor of Arts (BA)

- Communication Studies (p. 134)
- Communication Studies and Graphic and Information Design (p. 103)
- Communication and Media Studies (p. 135)
- Communication Studies and Media and Screen Studies
- Communication Studies and Sociology (p. 141)
- Communication Studies and Theatre (p. 143)
- English and Communication Studies (p. 145)
- Human Services and Communication Studies (p. 147)
- Linguistics and Communication Studies (p. 149)
- Media Arts and Communication Studies (p. 118)
- Media and Screen Studies and English (p. 154)
- Media and Screen Studies and History (p. 157)
- Media and Screen Studies and Journalism (p. 158)
- Media and Screen Studies and Media Arts (p. 117)

- Media and Screen Studies and Philosophy (p. 161)
- Media and Screen Studies and Political Science (p. 163)
- Media and Screen Studies and Sociology (p. 166)
- Media and Screen Studies and Theatre (p. 167)
- Media and Screen Studies (p. 153)
- Political Science and Communication Studies (p. 169)

### Bachelor of Science (BS)

- Business Administration and Communication Studies (p. 172)
- Communication Studies and Speech-Language Pathology and Audiology (p. 176)
- Computer Science and Communication Studies (p. 174)
- Health Science and Communication Studies (p. 177)
- Media and Screen Studies and Theatre (p. 180)
- Music and Communication Studies with Concentration in Music Industry (p. 181)
- Political Science and Communication Studies (p. 184)

### Minors

- Argumentation and Law (p. 186)
- Cinema Studies (p. 186)
- Communication Studies (p. 186)
- Digital Communications (p. 187)
- Film Production (p. 187)
- Human Communication (p. 187)
- Media Production (p. 188)
- Media and Screen Studies (p. 188)
- Oratory and Public Speaking (p. 188)
- Political Communication (p. 189)
- Professional Presentation (p. 189)
- Rhetoric (p. 190)
- Social Activism (p. 190)
- Sports, Media, and Communication (p. 190)

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), and Difference and Diversity (DD) may be met through electives in the major.

### Communication Studies Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
COMM 1000	Communication Studies at Northeastern	1
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
COMM 2301	Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two writing-intensive courses in communication studies from the following list:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 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

<b>Capstone</b>	
Complete one of the following:	4
COMM 4102	Health Communication Campaigns
COMM 4530	Communication and Quality of Life
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities

<b>Communication Studies Electives</b>	
Complete five communication studies courses not used to satisfy requirements above.	20

### Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

### Communication Studies Major Credit Requirement

Complete 52 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
COMM 1000	1	ENGW 1111	4	COMM Elective	4	Elective	4
COMM 1101	4	COMM Foundational Course	4	COMM Elective	4	Elective	4
COMM 1112	4	Elective	4				
Elective	4	Elective	4				
Elective	4						
		17	16		8		8

<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
COMM 2301	4	Co-op		Co-op	0	COMM writing-intensive	4
COMM Cluster Course	4					COMM Elective	4
Elective	4						
Elective	4						
EEAM 2000	1						
		17	0		0		8

<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
COMM writing-intensive	4	Co-op		Co-op		Elective	4
COMM Elective	4					Elective	4

Elective	4				
Elective	4				
		16	0		8

<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
COMM Elective	4	Capstone	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16	16		0		0

Total Hours: 130

## Communication and Media Studies, BA

The Department of Communication Studies offers majors in both communication studies and in media and screen studies. The department also offers an integrated major that allows students to combine COMM and MSCR courses to create a unique plan of study that features courses on the theory and practice of communication along with the study of media, cultural, and creative industries. Students graduating with a communication and media studies major can pursue a graduate degree or enter careers in advertising, communication education, healthcare, journalism, law, public relations, government/politics, media and film production, and social and human services.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), Creative Expression/Innovation (EI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) may be met through electives in the major.

### Communication and Media Studies Requirements

<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Introduction to College</b>		
COMM 1000	Communication Studies at Northeastern	1
or MSCR 1000	Media and Screen Studies at Northeastern	

### Common Requirements



COMM 1101	Introduction to Communication Studies	4
MSCR 1220	Media, Culture, and Society	4
COMM 2301	Communication Research Methods	4
<b>Communication Studies Foundational Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Media Studies Foundational Course</b>		
Complete one of the following:		4
MSCR 1320	Media and Social Change	
MSCR 1420	Media History	
MSCR 2220	Understanding Media	
<b>Diversity and Difference Cluster</b>		
Complete one of the following:		4
COMM 2304	Communication and Gender	
COMM 3304	Communication and Inclusion	
MSCR 2505	Digital Feminisms	
MSCR 3392	Gender and Film	
MSCR 3437	Media and Identity	
<b>Globalization Cluster</b>		
Complete one of the following:		4
COMM 2303	Global and Intercultural Communication	
MSCR 2325	Global Media	
<b>Creative Expression Cluster</b>		
Complete one of the following:		4
COMM 1112	Public Speaking	
MSCR 1230	Introduction to Film Production	
MSCR 3389	Screenwriting	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 3600	Film Theory	
MSCR 4208	TV History	
<b>Capstone</b>		

Complete one of the following: 4

COMM 4102	Health Communication Campaigns
COMM 4530	Communication and Quality of Life
COMM 4533	Consultation Skills
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities
COMM 4755	Production Capstone
COMM 4901	Seminar in Communications
MSCR 4623	Theories of Media and Culture

#### Elective courses

Choose five from the following list: 20

Any COMM courses not already counting above	
Any MSCR courses not already counting above	
ARTD 2380	Video Basics (with optional ARTD 2381)
ARTD 3480	Video: Sound and Image

#### Major Grade Requirement

No more than three grades below a C in COMM and MSCR courses may be used to fulfill major requirements.

#### Program Requirement

128 total semester hours required

### Communication Studies and Graphic and Information Design, BA

The Department of Communication Studies and the Department of Art + Design offer a combined major in communication studies and graphic and information design. Students interested in the combined major integrate the study of communication skills and processes with the design of message and meaning, integrating text, image, and data.

#### Program Requirements

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

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

#### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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	
<b>Communication Electives</b>		
Complete three COMM courses.		12

### Graphic and Information Design Requirements

Code	Title	Hours
<b>Introduction to Art and Design</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4

### 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
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Graphic and Information Design Elective</b>		
Complete one course with the corresponding tools course, if indicated, from the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (with optional ARTF 1125)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3351	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
<b>Integrative Course</b>		
COMM 4602	Contemporary Rhetorical Theory	4
or ARTG 4551	Design Degree Project 2	

### 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 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or COMM 1000	1	ENGW 1111	4	Communication studies elective	4	Vacation	0

COMM 1101	4	Communicati studies foundation course	4	Foreign language core course	4	
ARTG 1250	4	COMM 1112 or 2301	4			
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2220 (with optional ARTF 2221)	4			
Elective	4					
	17		16		8	0

**Year 2**

Fall	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	4	Communicati studies elective	4				
ARTH 2210	4	Foreign language core course	4				
ARTG 2250 (with optional ARTG 2251)	4	ARTG 2252	4				
		EEAM 2000	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Communication studies elective	4	Communication studies elective	4	Co-op	0
		ARTH 2215	4	Elective	4		
		ARTG 3350	4				
		ENGW 3314 or 3315	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Communication studies writing-intensive	4	Vacation	0	Co-op	0
		Elective	4				
		ARTG 3451	4				
		ARTG 4550	4				
	0		16		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	COMM 4602 or ARTG 4551	4
		Graphic and information design 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
ARTF 1000 or COMM 1000	1	Communication studies foundation course	4	Communication studies elective	4	Vacation	0
COMM 1101	4	ENGW 1111	4	Foreign language elective	4		
ARTG 1250	4	ARTF 2220 (with optional ARTF 2221)	4				
ARTF 1122 (with optional ARTF 1123)	4	COMM 1112 or 2301	4				
Elective	4						
	17		16		8		0

**Year 2**

Fall	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					Communicati studies writing- intensive	4
Elective	4						
EEAM 2000	1						
ARTG 2250 (with optional ARTG 2251)	4						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication studies elective	4	Co-op	0	Co-op	0	Vacation	0
Foreign language core course	4						
ARTH 2215	4						
ARTG 2252	4						
	16		0		0		0

**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 or 3315	4			
ARTG 3350	4			
	16	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
Communication studies writing-intensive	4	COMM 4602 or ARTG 4551	4
ARTG 3451	4	Graphic and information design 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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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	Title	Hours
<b>Introduction to Media Studies</b>		
MSCR 1220	Media, Culture, and Society	4

**Introduction to Screen Theory**

MSCR 2220	Understanding Media	4
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**Advanced Theory**

MSCR 4623	Theories of Media and Culture	4
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**Media and Screen Electives**

Complete five of the following: 20

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 3426	Popular Music as Media Form
MSCR 3435	Media Industries
MSCR 3437	Media and Identity
MSCR 2160	Narrative Filmmaking
MSCR 3389	Screenwriting
MSCR 3392	Gender and Film
MSCR 3446	Documentary Production
MSCR 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 4992	Directed Study
MSCR 4993	Independent Study
MSCR 3389	Screenwriting

**Communication Studies Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
COMM 1000	Communication Studies at Northeastern	1
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following: 4		
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following: 4		
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	

COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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	

<b>Communication Electives</b>		
Complete three COMM courses.		12

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
COMM 4602	Contemporary Rhetorical Theory	4
or MSCR 3600	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.

**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	
Year 2							
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 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 elective	4	Co-op		Co-op		Vacation	
COMM elective	4						
COMM writing-intensive	4						
MSCR 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 writing-intensive	4						
MSCR advanced elective	4						
MSCR elective	4						
		16		0		0	
						0	

Year 5			
Fall	Hours	Spring	Hours
COMM 4602 or MSCR 3600	4	MSCR 4623	4
COMM elective	4	Elective	4
MSCR advanced elective	4	Elective	4
Elective	4	Elective	4
		16	
		16	

Total Hours: 130

**Sample Four Years, No Co-ops**

Year 1			
Fall	Hours	Spring	Hours
COMM 1000	1	MSCR 2220	4
MSCR 1220	4	COMM 1112 or 2301	4
COMM 1101	4	Elective	4
Elective	4	Elective	4



Elective	4		
	17		16
<b>Year 2</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
MSCR elective	4	COMM cluster course	4
MSCR elective	4	MSCR elective	4
COMM foundation course	4	MSCR elective	4
Elective	4	Elective	4
	16		16
<b>Year 3</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
COMM elective	4	COMM elective	4
COMM writing-intensive	4	COMM writing-intensive	4
MSCR elective	4	MSCR advanced elective	4
Elective	4	Elective	4
	16		16
<b>Year 4</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
COMM 4602 or MSCR 3600	4	MSCR 4623	4
COMM elective	4	Elective	4
MSCR advanced elective	4	Elective	4
Elective	4	Elective	4
	16		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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Societies and Institutions (SI) and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Analyzing and Using Data (AD) may be met through electives in the major.

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1000	Communication Studies at Northeastern	1
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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	
<b>Communication Studies Electives</b>		
Complete three COMM courses.		12

**Sociology Requirements**

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Introductory Electives</b>		
Complete two of the following:		8
SOCL 1120	Society and Health	
SOCL 1228	Social Problems	
SOCL 1241	Violence and Society	
SOCL 1245	Sociology of Poverty	
SOCL 1255	Sociology of the Family	
SOCL 1260	Gender in a Changing Society	
SOCL 1275	Social Stratification	
SOCL 1290	Juvenile Delinquency	
SOCL 1295	Drugs and Society	

<b>Intermediate-Level Elective</b>		
Complete one of the following:		4
SOCL 2268	Social Movements	
SOCL 2270	Race and Ethnic Relations	
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 3440	Sociology of Human Service Organizations	
SOCL 3450	Class, Power, and Social Change	
SOCL 3408	Sociology of Organizations	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3485	Environment, Technology, and Society	
SOCL 3487	Applied Sociology: Practice and Theory	

<b>Advanced-Level Elective</b>		
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 4528	Computers and Society	
SOCL 4580	Special Topics in Sociology	
SOCL 4992	Directed Study	

**Capstone and Integrative Requirements**

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
COMM 3320	Political Communication	
COMM 3532	Theories of Conflict and Negotiation	
SOCL 1246	Environment and Society	

<b>Capstone/Senior Seminar Option</b>		
Complete one of the following two options:		8
<i>Communications Capstone Option</i>		
Complete one COMM course and one SOCL course from the following list:		

COMM 4102	Health Communication Campaigns
COMM 4530	Communication and Quality of Life
COMM 4625	Online Communities
SOCL 3000 to SOCL 4999	
<i>Sociology Senior Seminar Option</i>	
Complete SOCL 4600 and one COMM course from the following list:	
SOCL 4600	Senior Seminar
COMM 3000 to COMM 4999	

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Communication Studies and Sociology Combined-Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
COMM 1000	1	ENGW 1111	4	Communication Studies cluster course	4	Introductory Sociology elective	4		
COMM 1101	4	Communicati Studies foundation course	4	Elective	4	Elective	4		
COMM 1112 or 2301	4	SOCL 2320	4						
SOCL 1101	4	SOCL 2321	4						
SOCL 3300	4								
		17			16			8	8
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Communication Studies elective	4	CO-OP	4	CO-OP	4	0 Communication Studies elective	4		
Elective	4					Communicati Studies writing-intensive	4		
Introductory Sociology elective	4								
Elective	4								
EEAM 2000	1								
		17			0			0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication Studies writing-intensive	4	CO-OP		CO-OP		Communication Studies elective	4
Intermediate Sociology elective	4					Elective	4
Advanced Writing in the Discipline	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Elective	4	Communication Studies or Sociology capstone	4
Elective	4	Communication Studies or Sociology capstone elective	4
Integrative course	4	Elective	4
Advanced Sociology elective	4	Elective	4
	16		16

Total Hours: 130

**Communication Studies and Theatre, BA**

The Departments of Theatre and Communication Studies offer an interdisciplinary combined major that unites the artistic dimensions of theatre with the practical skills and theories in communication studies. The program provides both the creative study of theater performance, literature, playwriting, and directing with the ability to research and deliver a compelling speech and think critically and write effectively. The two disciplines unite in shared values of original personal expression, professional collaboration, and experiences in the cultural, social, and ethical impact of theatre as human communication.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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
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**Communication Studies Common Requirements**

COMM 1000	Communication Studies at 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:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	

**Cluster Course**

Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

**Writing-Intensive Courses**

Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 COMM courses.	12
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### Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

<b>Theatre Texts and Context</b>		
Choose one of the following: 4		
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

<b>Intermediate or Advanced Technique</b>		
Choose two of the following: 8		
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

### Integrative Requirements

Code	Title	Hours
<b>Theatre Capstone</b>		
THTR 4702	Capstone Rehearsal and Performance	4

<b>Communication Studies Integrative Course</b>		
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 Four Years, Two Co-ops in Spring/Summer

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or THTR 1000	1	COMM 1112 or 2301	4	Communicaton studies foundation course	4	Vacation	
COMM 1101	4	THTR 1131	4	Communicatc studies elective	4		
THTR 1100	1	Foreign language course or elective	4				
THTR 1101	4	ENGW 1111	4				
THTR 1120	4						
Foreign language elective or THTR elective	4						
		18		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communicaton studies cluster course	4	Co-op #1		Co-op #1		Elective	4
Communicatc studies elective	4					Elective	4
THTR 2000	1						
THTR 2325	4						
Theatre text and context	4						
EEAM 2000	1						
		18		0		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1270	4	Comm writing intensive	4	Optional Co-op #2	0	Optional Co-op #2	0
THTR intermediate or advanced	4	Comm elective	4				
Foreign language or elective	4	Elective	4				
ENGW 3314 or 3315	4	Elective	4				
		16		16		0	

**Year 4**

Fall	Hours	Spring	Hours
Communication studies writing-intensive	4	THTR 4702	4
THTR Intermediate or advanced elective 2	4	Comm integrative course	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 132

**English and Communication Studies, BA**

The English department and the communication studies department offer an interdisciplinary combined major in English and communication studies. Broadly speaking, students in the combined major in English and communication studies at Northeastern integrate the study of literature and writing with studies of media, social, corporate, and political communications.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
	or ENGL 1410	Introduction to Writing Studies

**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 Race
ENGL 2460	Multiethnic Literatures of the U.S.
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 4000	Topics in Early Literatures
ENGL 4020	Topics in 17th- and 18th-Century Literatures

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance
ENGL 3720	19th-Century Major Figure
ENGL 4040	Topics in 19th-Century Literatures
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	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

**Communication Studies Requirements**

Code	Title	Hours
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**Communication Studies Common Requirements**

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following: 4

COMM 1210	Persuasion and Rhetoric
COMM 1231	Principles of Organizational Communication
COMM 1225	Communication Theory
COMM 1255	Communication in a Digital Age

**Cluster Course**

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

**Writing-Intensive Courses**

Complete two of the following: 8

COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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 additional COMM courses. 12

**Integrative Requirement**

Code	Title	Hours
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**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	

Foreign Language	4			
	16	0	0	8

**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

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL 1000 or COMM 1000	1	Communication Studies foundational course	4	Communication Studies cluster course	4	Foreign Language	4
ENGL 1400	4	English diversity course	4	Communication Studies elective	4	Communication Studies elective	4
COMM 1101	4	English Pre-19th Century Literature elective	4				
COMM 1112 or 2301	4	ENGL 1160 or 1410	4				
Elective	4						
	17		16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
English 19th-20th-21st Century Literature elective	4	CO-OP	4	CO-OP	4	Communication Studies writing-intensive	4
English Theories and Methods course	4					Communication Studies elective	4
Foreign Language	4						
Elective	4						
EEAM 2000	1						
	17		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
English Comparative Literature elective	4	CO-OP	4	CO-OP	4	Elective	4
English Writing elective	4					Elective	4
Communication Studies writing-intensive	4						

Year 4			
Fall	Hours	Spring	Hours
English elective	4	English capstone	4
English elective	4	Integrative COMM Course	4
Integrative ENGL course	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Human Services Requirements

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	
<b>Human Services Elective</b>		
Complete two additional HUSV courses.		8

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 COMM courses 12

### Capstone

Complete one of the following capstone/senior seminar options:

Code	Title	Hours
<b>Communications Capstone Option</b>		
Complete one of the following courses:		4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4625	Online Communities	
Complete one additional HUSV elective.		4
<b>Human Services Capstone Option</b>		
HUSV 4700	Senior Seminar in Human Services	4
Complete one course in the following range:		4
COMM 3000 to COMM 4999		

### Integrative Course

Code	Title	Hours
HUSV 3590	Nonprofit Communications	4

### Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or HUSV 1000	1	MATH 1215	4	Communication Studies foundation course	4	Communication Studies cluster course	4
HUSV 1101	4	HUSV 2300	4	Communication Studies elective	4	Communication Studies elective	4
ENGW 1111	4	HUSV Elective	4				
COMM 1101	4	COMM 1112 or 2301	4				
Elective	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 2970	4	CO-OP		CO-OP		Communication Studies writing-intensive	4

Communicati Studies elective	4			Elective	4
Elective	4				
HUSV Elective	4				
EEAM 2000	1				
	17	0	0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Human Services Diverse Populations	4	CO-OP		CO-OP		Communication Studies writing- intensive	4
HUSV 3570	4					Elective	4
ENGW 3315	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
HUSV 3900	4	Capstone	4
HUSV 3590	4	Elective	4
Additional COMM/ HUSV Elective	4	Elective	4
Elective	4	HUSV 4994	6
	16		18

Total Hours: 132

## Linguistics and Communication Studies, BA

In the combined major in linguistics and communication studies, students learn about the formal structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) while simultaneously mastering the fundamentals of effective communication and of communication theory and practice. Students receive extensive training in writing and speaking, both for a technical audience and more generally; and they explore the role of language and communication in society, both from a broad theoretical perspective and in narrower, more focused and applied domains.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two of the following (not counted elsewhere):		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Required Courses</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
COMM 2301	Communication Research Methods	4
<b>Foundation Course</b>		
Complete one course from the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

**Cluster Course**

Complete one course from the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

**Writing-Intensive Course**

Complete one course from the following:		4
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 3610	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
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**Integrative Requirement**

Code	Title	Hours
<b>Sociolinguistics</b>		
LING 3442	Sociolinguistics	4
<b>Communication Studies Integrative Course</b>		
Complete one of the following, not used to fulfill above requirements:		4
COMM 3415	Communication Criticism	
COMM 4602	Contemporary Rhetorical Theory	

**Capstone Experience**

Complete one of the following, not used to fulfill above requirements:		4
LING 4654	Seminar in Linguistics	
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4533	Consultation Skills	
COMM 4602	Contemporary Rhetorical Theory	
COMM 4608	Strategic Communication Capstone	
COMM 4625	Online Communities	

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Linguistics and Communication Studies Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Patterns:**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1000	1	LING 2350	4	COMM Studies Elective	4	Elective	4
LING 1150	4	LING 3412	4	Elective	4	Elective	4
COMM 1101	4	COMM Studies Foundation Course	4				
COMM 1112	4	Elective	4				
ENGW 1111	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Linguistic Structure or Linguistics Elective	4	Linguistic Structure or Linguistics Elective	4	COMM Studies Elective	4	COOP	4
COMM 2301	4	LING 3442 (Or Linguistics Elective)	4	Elective	4		
COMM Studies Cluster Course	4	COMM Studies Elective	4				
Foreign Language Course	4	Foreign Language Course	4				
EEAM 2000 or EESC 2000	1						
		17		16		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COOP		Linguistic Structure or Linguistics Elective	4	COMM Studies Writing Intensive	4	COOP	4
		LING 3442 (or Linguistics Elective)	4	Elective	4		
		ENGW 3315	4				
		Foreign Language Course	4				
		0		16		8	



**Year 4**

Fall	Hours	Spring	Hours
COOP		Linguistic Structure or Linguistics Elective	4
		COMM 3415 or 4602	4
		COMM Studies Writing Intensive	4
		Integrative Capstone Experience	4
	0		16

Total Hours: 130

**Five Years, Three Summer 2/Fall Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1000	1	LING 2350	4	Vacation	0	Vacation	0
LING 1150	4	LING 3412	4				
COMM 1101	4	COMM Studies Foundation Course	4				
COMM 1112	4	Elective	4				
ENGW 1111	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Linguistic Structure or Linguistics Elective	4	Linguistic Structure or Linguistics Elective	4	Vacation	0	COOP	0
COMM 2301	4	COMM Studies Elective	4				
COMM Studies Cluster Course	4	Foreign Language Course	4				
Foreign Language Course	4	COMM Studies Elective	4				
		EEAM 2000 or EESC 2000	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COOP	0	Linguistic Structure or Linguistics Elective	4	COMM Studies Elective	4	COOP	0

LING 3442 (or Linguistics Elective)	4	Elective	4
ENGW 3315	4		
Foreign Language Course	4		
	0	16	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COOP	0	Linguistic Structure or Linguistics Elective	4	Elective	4	COOP	0
		LING 3442 (or Linguistics Elective)	4	Elective	4		
		COMM Studies Writing Intensive	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
COOP	0	COMM 3415 or 4602	4
		Integrative Capstone Experience	4
		COMM Studies Elective	4
		Elective	4
	0		16

Total Hours: 130

**Media Arts and Communication Studies, BA**

The Department of Communication Studies and the Department of Art + Design offer a combined major in media arts and communication studies. Students interested in the combined major integrate the study of communication skills and processes with the study of the creation of the narrative arts, required for professional work in documentary film, game art and promotion, visualization, motion graphics, interactive art, illustration, and short animated films.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath attributes Creative Expression and Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

In order to graduate, students must complete Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) in their electives.

### Media Arts Courses

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art and Design Foundations</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221 )	4
<b>Drawing Fundamentals</b>		
ARTF 1120	Observational Drawing	4
or ARTF 1121	Conceptual Drawing	
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2212	Survey of the Still and Moving Image	4
<b>Degree Project</b>		
ARTD 4530	Media Arts Degree Project 1	4
<b>Media Art Basics Electives</b>		
Complete two of the following:		8
ARTD 2360	Introduction to Photography	
ARTD 2370	Animation Basics	
ARTD 2380	Video Basics	
<b>Art and Design Electives</b>		
Complete any two courses not previously taken in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or co-requisites have been met.		8-9

### Communication Studies Courses

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		

Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

### Writing-Intensive Courses

Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 COMM courses. 12

### Integrative Requirement

Code	Title	Hours
<b>Bridge/Integrative Requirement</b>		
COMM 3415	Communication Criticism	4

### Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or COMM 1000	1	ARTF 2220 (with optional ARTF 2221)	4	Communication studies elective	4	Communication studies elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTH 2212	4	Elective	4	Elective	4
ARTH 2210	4	COMM 1112 or 2301	4				
COMM 1101	4	Drawing elective	4				
ENGW 1111	4						
		17		16		8	
						8	

Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Media arts basics elective	4	Co-op		Co-op		Communication studies elective	4		
Communicati studies cluster	4					Elective	4		
Communication studies foundation	4								
Communicati studies writing-intensive	4								
EEAM 2000	1								
		17			0			0	8
Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Media arts basics elective	4	Co-op		Co-op		Foreign Language	4		
Communicati studies writing-intensive	4					Elective	4		
Art + design elective	4								
Art + design elective	4								
		16			0			0	8
Year 4									
Fall	Hours	Spring	Hours				Hours		
ARTD 4530	4	Foreign Language	4						
COMM 3415	4	Elective	4						
Foreign Language	4	Elective	4						
Elective	4	Elective	4						
		16			16				

Total Hours: 130

## Media and Screen Studies, BA

The Bachelor of Arts in Media and Screen Studies offers courses in analysis and practice. Required courses offer students an opportunity to obtain the critical-thinking skills necessary to better understand media content, media technology, and media production. Students then decide how many production and analysis courses they want to take. Choosing from a broad range of electives, students can take more than half their major in media and film production courses, can take a majority of courses that critically examine media content and technology, or can combine courses in other ways.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), and Analyzing and Using Data (AD) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MSCR 1000	Media and Screen Studies at Northeastern	1
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
MSCR 1420	Media History	4
<b>Foundation Course (Production or Theory)</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensives</b>		
Complete two of the following:		8
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	
<b>Capstone (Production or Theory)</b>		
Complete one of the following:		4
MSCR 4623	Theories of Media and Culture	
COMM 4755	Production Capstone	
ARTD 5582	Collaborative Video and Community Engagement	
<b>Media and Screen Studies Electives</b>		

Complete five courses from the following list or media and screen studies courses not used to satisfy requirements above: 20

ARTD 2380	Video Basics (with optional ARTD 2381)
ARTD 3480	Video: Sound and Image
ARTD 3485	Experimental Video
MSCR 2160	Narrative Filmmaking
MSCR 2336	American Film and Culture
MSCR 3389	Screenwriting
MSCR 3446	Documentary Production
MSCR 3920	Topics in Film Studies
COMM 1450	Sound Production for Digital Media
COMM 2550	Television Field Production
COMM 2655	Television Studio Production
COMM 3655	Digital Editing for TV
COMM 3750	Special Effects and Postproduction for Television

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to fulfill degree requirements.

### Media and Screen Studies Credit Requirement

52 total semester hours required in the major

### Program Requirement

128 total semester hours required

### Plan of Study

Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320	4	Media and screen studies elective	4	Elective	4
MSCR 1220	4	ENGW 1111	4	Elective	4	Elective	4
Elective	4	Foreign language core course	4				
Elective	4	Elective	4				
Foreign language core requirement	4						
		17		16		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1420	4	Media and screen studies elective	4	Elective	4	Co-op	0
MSCR 1230 or 2220	4	Media and screen studies diversity/globalization course	4	Elective	4		

Foreign language core course	4	Elective	4				
Elective	4	Elective	4				
		EEAM 2000	1				
		16		17		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Media and screen studies elective	4	Media and screen studies elective	4	Co-op	0
		Media and screen studies writing-intensive	4	Elective	4		
		MSCR Elective	4				
		Elective	4				
		0		16		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MSCR 4623	4				
		Media and screen studies writing-intensive	4				
		Elective	4				
		Elective	4				
		0		16			

Total Hours: 130

## Media and Screen Studies and English, BA

The media and screen studies program and the Department of English offer a combined major in media and screen studies and English. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures. Majors become familiar with writing practices and media from the Middle Ages through the present, from the quill pen to computer code.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

## Theories and Methods



Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	

ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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
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**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
MSCR 3600	Film Theory	4
ENGL 1450	Reading and Writing in the Digital Age	4
or ENGL 3340	Technologies of Text	

**Media and Screen Studies Grade Requirement**

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000 or ENGL 1000	1	MSCR 1320 or 1420	4	MSCR elective	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Foreign Language	4	Elective	4
ENGL 1400	4	ENGL pre-19th- century literature elective	4				
ENGL 1160 or 1410	4	Foreign Language	4				
Foreign Language	4						
		17		16		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR elective	4	Co-op	4	Co-op	4	Elective	4
ENGL 19th-, 20th-, and 21st-century literature elective	4					Elective	4
ENGL diversity elective	4						

MSCR diversity/globalization	4				
EEAM 2000	1				
	17	0	0		8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
ENGL theories and methods elective	4	MSCR elective	4	Elective	4
ENGL elective	4	ENGL comparative elective	4	Elective	4
MSCR writing-intensive	4	MSCR writing-intensive	4		
ENGL elective	4	ENGL 1450 or 3340	4		
	16	16	8		0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		ENGL writing elective	4		
		MSCR 3600	4		
		ENGL 4710 or 4720	4		
		Elective	4		
	0	16			0

Total Hours: 130

## Media and Screen Studies and History, BA

The Media and Screen Studies Program and the Department of History offer a combined major in media and screen studies and history. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of local and regional histories as well as of the global exchanges between nations, regions, and cultures.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPATH Requirements

All undergraduate students are required to complete the NUPATH Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUPATH requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUPATH requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUPATH requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	

<b>Foundation Course</b>		
Complete one of the following:		
MSCR 1230	Introduction to Film Production	4
MSCR 2220	Understanding Media	

<b>Diversity or Globalization Course</b>		
Complete one of the following:		
MSCR 3392	Gender and Film	4
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	

<b>Writing-Intensive</b>		
Complete two of the following:		
MSCR 2505	Digital Feminisms	8
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		
ARTD 2380	Video Basics	12
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1

HIST 1201	First-Year Seminar	4
<b>Introductory-Level Course</b>		
Complete one course in the following range:		4
HIST 1001–HIST 1999		
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one course from the following:		4
HIST 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	
<b>Intermediate/Advanced History Cluster</b>		
Complete three courses in the following range:		12
HIST 2303–HIST 5999		
<b>Advanced History</b>		
Complete one course in the following range:		4
HIST 3000–HIST 5999		
<b>Capstone</b>		
HIST 4701	Capstone Seminar	

**Integrative Requirement**

Code	Title	Hours
HIST 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**

**Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	MSCR foundation course	4	Elective	4	Elective	4
HIST 1200 and HIST 1201	5	Intro-level HIST course	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
		18	16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
HIST 2301 and HIST 2302	5						
Elective	4						
EEAM 2000	1						
		18		0		0	
						8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR writing-intensive	4	Co-op		Co-op		Elective	4
Pre-1800 history elective	4					Elective	4
Intermediate/advanced history elective 1	4						
MSCR elective	4						
		16		0		0	
						8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR writing-intensive	4	MSCR elective	4				
Intermediate/advanced history elective 2	4	Intermediate/advanced history elective 3	4				
Advanced history elective	4	HIST 4701	4				
HIST 1279	4	Elective	4				
		16		16			

Total Hours: 132

**Media and Screen Studies and Journalism, BA**

A Bachelor of Arts in Journalism and Media and Screen Studies is designed for the student who is interested in pursuing a career as a journalist specializing in the film industry.

**Program Requirements**

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	

COMM 3750	Special Effects and Postproduction for Television
COMM 4755	Production Capstone

### Journalism Requirements

Code	Title	Hours
<b>Journalism Foundations</b>		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist’s Toolbox (A grade of C or higher is required)	5
JRNL 1150	Understanding Today’s News	4
JRNL 2201	Journalism 2: Intermediate Reporting (A grade of C or higher is required)	4
<b>Journalism and Advanced Writing</b>		
JRNL 2301	Visual Storytelling in Journalism (A grade of C or higher is required)	4
<b>Television News</b>		
JRNL 5314	Video News Reporting and Producing	4
<b>Ethics and Issues</b>		
JRNL 4650	Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Complete three courses in the following range:		12
JRNL 2000–JRNL 5999		

### Integrative Requirement

The following course also counts toward the media and screen studies requirements above.

Code	Title	Hours
<b>Integrative Course</b>		
MSCR 4623	Theories of Media and Culture	4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

### Program Requirement

129 total semester hours required

### Plan of Study

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000 or JRNL 1000	1	MSCR 1230 or 2220	4	Foreign language	4	Foreign language	4
MSCR 1220	4	MSCR 1320 or 1420	4	Elective	4	Elective	4
JRNL 1101 and JRNL 1102	5	JRNL 2201	4				
JRNL 1150	4	Foreign language	4				
ENGW 1111	4						
		18		16		8	
						8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Co-op	0	Co-op	0	Elective	4
MSCR elective 1	4					Elective	4
MSCR diversity or globalization	4						
JRNL 2301	4						
Journalism elective 1	4						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 4623	4	Co-op	0	Co-op	0	Elective	4
MSCR writing intensive 1	4					Elective	4
JRNL 5314	4						
Journalism elective 2	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
MSCR elective 2	4	MSCR elective 3	4
MSCR writing intensive 2	4	Elective	4
JRNL 4650	4	Elective	4
Journalism elective 3	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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

**Media and Screen Studies Requirements**

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	

<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	

<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	

<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

**Media and Screen Studies Electives**

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
Recommendation: Complete MSCR 4623 as one of your MSCR electives to fulfill NUpath capstone.		
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	

COMM 3750	Special Effects and Postproduction for Television
COMM 4755	Production Capstone

### Media Arts Courses

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional 2221)	4
<b>Drawing Fundamentals</b>		
ARTF 1120	Observational Drawing	4
or ARTF 1121	Conceptual Drawing	
<b>Art + Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2212	Survey of the Still and Moving Image	4
<b>Media Arts Basics Electives</b>		
Complete two of the following sets:		8
ARTD 2360	Introduction to Photography	
ARTD 2370	Animation Basics	
ARTD 2380	Video Basics	
<b>Media Arts Capstone</b>		
ARTD 4530	Media Arts Degree Project 1	4
<b>Art + Design Electives</b>		
Complete any two courses not previously completed in ARTG, ARTE, ARTD, ARTH, or ARTS courses as long as prerequisites or corequisites have been met.		8-9

### Integrative Course

Code	Title	Hours
MSCR 3600	Film Theory	4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to fulfill degree requirements.

### Program Requirement

128 total semester hours required

### Plan of Study

#### SAMPLE FOUR YEARS, TWO CO-OPS

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 1000 or MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective	4
MSCR 1220	4	ARTH 2212	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTF 1120 or 1121	4				
ARTF 2220 (with optional 2221)	4	Elective	4				

ENGW 1111	4						
	17		16		8		8
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
MSCR foundation	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
Media arts basics elective	4						
ARTH 2210	4						
EEAM 2000	1						
	17		0		0		8
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR writing-intensive	4					Elective	4
Media arts basics elective	4						
Art + design elective	4						
	16		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
MSCR 3600	4	ARTD 4530	4				
MSCR writing-intensive	4	MSCR elective	4				
Art + design elective	4	MSCR elective	4				
Elective	4	Elective	4				
	16		16				

Total Hours: 130

### Media and Screen Studies and Philosophy, BA

The Media and Screen Studies Program and the Department of Philosophy and Religion offer a combined major in media and screen studies and philosophy. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of questions and theories related to morality, society, religion, and the natural and social sciences.

### Program Requirements

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



## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), and Difference and Diversity (DD) may be met through electives in the major.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
(NUpath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a philosophy capstone course is not selected for 'Restricted Philosophy Electives.')		
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	

ARTD 3485	Experimental Video
COMM 1450	Sound Production for Digital Media
COMM 2550	Television Field Production
COMM 2655	Television Studio Production
COMM 3655	Digital Editing for TV
COMM 3750	Special Effects and Postproduction for Television
COMM 4755	Production Capstone

## Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

### Restricted Philosophy Electives

Complete three of the following with at least one course at the 4000 or 5000 level:		12
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4510	Philosophy of Science	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

### Philosophy Electives

Complete three additional electives from the philosophy department.		12
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## Integrative Requirement

Code	Title	Hours
MSCR 3600	Film Theory	4

## Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

## Major Credit Requirement

Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4
PHIL 1115	4	PHIL 2325 or POLS 2325	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
	17		16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Restricted PHIL elective 1	4	Elective	4	Co-op	
MSCR elective	4	MSCR writing-intensive	4	Elective	4		
PHIL 2330	4	PHIL elective	4				
MSCR diversity/globalization	4	Elective	4				
PHIL elective	4						
	17		16		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Restricted PHIL elective 2	4	Elective	4	Co-op	
		MSCR writing-intensive	4	Elective	4		
		PHIL elective	4				
		MSCR elective	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		MSCR 3600	4				
		MSCR elective	4				
		Restricted PHIL elective 3	4				
		Elective	4				
	0		16				

Total Hours: 130

### Media and Screen Studies and Political Science, BA

The Media and Screen Studies Program and the Department of Political Science offer a combined major in media and screen studies and political

science. The combined major integrates the analysis, research, and production of traditional and emerging media along with courses on American government, comparative politics, international relations, and research methods.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI) and Difference and Diversity (DD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media Studies Requirements

Code	Title	Hours
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#### Media and Screen Studies Common Requirements

MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	

#### Foundation Course

Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	

#### Diversity or Globalization Course

Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	

#### Writing-Intensive

Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	

MSCR 3422 Media Audiences

MSCR 4208 TV History

**Media and Screen Studies Electives**

Code	Title	Hours
Complete three courses from MSCR or from the following (NUpath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a political science capstone is not taken for a political science elective):		
ARTD 2380	Video Basics	12
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

**Political Science Requirements**

Code	Title	Hours
<b>Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following: 4		
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Politics in Media/Art**

Complete two courses. Consult academic adviser for additional courses. 8

POLS 2368 Music and Politics in America and Abroad

**Elective Courses**

Complete two POLS courses or complete a concentration. 8

NUpath capstone recommendation: Complete a POLS capstone course as one of your POLS electives if MSCR 4623 is not taken for a MSCR elective.

**Political Science Concentration (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 164)
- Campaigns and Elections (p. 164)
- Comparative Politics (p. 164)
- Identity, Culture, and Politics (p. 165)
- International Relations and Diplomacy (p. 165)
- Law and Legal Studies (p. 165)

- Public Policy (p. 165)
- Security Studies (p. 165)

**Integrative Requirements**

Code	Title	Hours
<b>Required Courses</b>		
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 AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Code	Title	Hours
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	

POLS 3324	Law and Society
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study  
Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	POLS 1155	4	Elective	4	Elective	4
POLS 1150	4	MSCR foundation	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
		17			16		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	Co-op		Co-op		Elective	4
POLS 2400	4					Elective	4

MSCR diversity/globalization	4			
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 writing-intensive	4	Elective	4	Co-op	
MSCR writing-intensive	4	Politics in media/art elective	4	Elective	4		
MSCR elective	4	MSCR elective	4				
POLS 3320	4	POLS elective	4				
	16		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		Politics in media/art elective	4
		POLS elective	4
		Elective	4
		MSCR 4602	4
	0		16

Total Hours: 130

## Media and Screen Studies and Sociology, BA

The Media and Screen Studies Program and the Department of Sociology and Anthropology offer a combined major in media and screen studies and sociology. The combined major integrates the analysis, research, and production of traditional and emerging media along with the critical perspective needed for studying the social and cultural arrangements in which people live, for understanding how societies function, for investigating the conditions under which people change their institutions, and for describing the modes and conditions of cooperation that make social life possible.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
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#### Media and Screen Studies Common Requirements

MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	

#### Foundation Course

Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	

#### Diversity or Globalization Course

Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	

#### Writing-Intensive

Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
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Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Sociology Requirements

Code	Title	Hours
<b>Core Courses in Sociology</b>		
ANTH 1101	Peoples and Cultures	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
SOCL 4600	Senior Seminar	4
<b>Foundational Competency—Courses Numbered SOCL 1200 to SOCL 2900</b>		
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 Twenty-First-Century Workplace	
SOCL 2268	Social Movements	
SOCL 2270	Race and Ethnic Relations	
<b>Foundational Competency—Courses Numbered 3000 to 4999</b>		
Complete one of the following:		4
ANTH 3120	Consumer Cultures	
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ANTH 4580	Special Topics in Anthropology	
SOCL 3450	Class, Power, and Social Change	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 4518	Law and Society in a Digital World	
SOCL 4520	Race, Class, and Gender	
SOCL 4580	Special Topics in Sociology	

### Integrative Requirement

Code	Title	Hours
<b>Integrative Courses</b>		
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

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign language core course	4	Elective	4

MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4
SOCL 1101	4	Foreign language core course	4				
ANTH 1101	4	SOCL 3300	4				
ENGW 1111	4						
		17		16		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
Foreign language core course	4						
EEAM 2000	1						
SOCL 2320	4						
		17		0		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	
SOCL 2321	4	Co-op		Co-op		Elective	4
SOCL foundational competency elective 1	4					Elective	4
MSCR writing-intensive	4						
MSCR elective	4						
		16		0		0	

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
SOCL foundational competency elective 2	4	MSCR 3437	4			
MSCR elective	4	SOCL 4600	4			
MSCR writing-intensive	4	SOCL foundational competency elective	4			
SOCL 1246	4	Elective	4			
		16		16		

Total Hours: 130

### Media and Screen Studies and Theatre, BA

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design with related studies in screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices



of making theatre, film, and television as engaged citizens and creative artists.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirement Natural and Designed World (ND) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirement</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Courses</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Theatre Requirements

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	

THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3—Playing Shakespeare
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2

### Integrative Requirement

Code	Title	Hours
<b>Media and Screen Studies Capstone</b>		
MSCR 4623	Theories of Media and Culture	4
<b>Theatre Capstone</b>		
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

#### Sample Four Years, Two Co-ops

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective	4	
MSCR 1220	4	MSCR Foundation	4	Elective	4	Elective	4	
THTR 1101	4	THTR 1131	4					
THTR 1120	4	THTR 1270	4					
ENGW 1111	4							
		17			16			8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
MSCR Diversity/Globalization	4	Co-op		Co-op		Foreign language core course	4	
MSCR Elective	4					Elective	4	
THTR 2325	4							
THTR texts and context elective	4							
EEAM 2000	1							
THTR 1100	1							
		18			0			0
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
MSCR Writing Intensive	4	Co-op		Co-op		Elective	4	
MSCR Elective	4					Elective	4	
Intermediate or advanced technique elective	4							

Foreign language core course	4			
THTR 2000	1			
		17	0	0
				8
Year 4				
Fall	Hours	Spring	Hours	Hours
MSCR Writing Intensive	4	MSCR 4623	4	4
Intermediate or advanced technique elective	4	MSCR Elective	4	4
Foreign language core course	4	Elective	4	4
THTR 4702	4	Elective	4	4
		16	16	

Total Hours: 132

### Political Science and Communication Studies, BA

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete the core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4

POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Methodology**

POLS 2399	Research Methods in Political Science	4
or COMM 2301	Communication Research Methods	

**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:		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. 170).

- American Political Institutions (p. 170)
- Campaigns and Elections (p. 171)
- Comparative Politics (p. )
- Identity, Culture, and Politics (p. 171)
- International Relations and Diplomacy (p. )
- Law and Legal Studies (p. 171)
- Public Policy (p. 171)
- Security Studies (p. )

**Communication Studies Requirements**

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Communication Studies Electives**

Code	Title	Hours
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

**Cluster Course**

Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

**Writing-Intensive**

Complete two of the following: 8

COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 additional communication studies courses. 12

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3320	Politics and Mass Media	4
or COMM 3320	Political Communication	

**Capstone Requirement**

Complete one of the following. This course also counts toward the political science or communication studies elective requirement:		4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4533	Consultation Skills	
COMM 4602	Contemporary Rhetorical Theory	
COMM 4608	Strategic Communication Capstone	
COMM 4625	Online Communities	
COMM 4755	Production Capstone	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Political Science and Communication Studies Combined-Major Credit Requirement**

Complete 84 semester hours in the major.

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Program Requirement**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	

POLS 3300	The U.S. Congress
POLS 3302	Judicial Process and Behavior
POLS 3307	Public Policy and Administration
POLS 3310	Public Opinion, Voting, and Elections
POLS 3160	Campaign Strategy
POLS 3162	Local Campaigns and Elections

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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**

**Sample Four Years, Two Co-ops**

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
POLS 1000 or COMM 1000	1	POLS 1155	4	Communication Studies Foundation Course	4	Communication Studies Cluster Course	4		
POLS 1150	4	COMM 1112 or 2301	4	Communication Studies Elective	4	Elective	4		
COMM 1101	4	Foreign Language 2	4						
ENGW 1111	4	Elective	4						
Foreign Language 1	4								
		17			16			8	8
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
POLS 1160	4	Co-op		Co-op		Communication Studies Writing Intensive	4		
POLS 2400	4					Elective	4		
Communication Studies Elective	4								
Foreign Language Culture Course	4								
EESH 2000 or EEAM 2000	1								
		17			0			0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Political Thought Course	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2399 or COMM 2301	4					Political Science Elective	4
Communication Studies Elective	4						
POLS Upper-Division Elective 1	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
POLS Upper-Division Elective 2	4	Capstone	4
Political Science Elective	4	Elective	4
Integrative Course	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

## Business Administration and Communication Studies, BS

The combined major between business administration and communication studies provides students with a robust overview of business and communication studies. This combined major seeks to prepare students for career opportunities in growing industry markets such as public relations, marketing communications, and digital media.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Business Core Requirements**

Code	Title	Hours
BUSN 1102	Personal Skill Development for Business	1
or COMM 1000	Communication Studies at Northeastern	

**Accounting**

ACCT 1201	Financial Accounting and Reporting	4
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**Business Statistics**

MGSC 2301	Business Statistics	4
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**Business Core Option 1**

INTB 1203	International Business and Global Social Responsibility	4
or ORGB 3201	Organizational Behavior	

**Marketing**

MKTG 2201	Introduction to Marketing	4
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**Finance**

FINA 2201	Financial Management	4
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**Business Core Option 2**

ACCT 2301	Managerial Accounting	4
or ENTR 2301	Innovation!	
or MISM 2301	Management Information Systems	
or SCHM 2301	Supply Chain and Operations Management	

**Business Concentration Required**

A concentration is required and may be chosen from the following list:

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

**Supporting Business Courses**

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
<b>Macroeconomics and Microeconomics</b>		
Complete one of the following:		4
ECON 1115	Principles of Macroeconomics	
ECON 1116	Principles of Microeconomics	

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 1113	Business and Professional Speaking	
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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	
<b>Communication Studies Electives</b>		
Complete three additional electives. Choose from any communication studies courses not used to satisfy requirements above or related electives outside of communication studies.		12
ARTF 2220	Movement and Time	
ARTD 2360	Introduction to Photography	
ARTD 2380	Video Basics	
ARTD 3460	Photography: Concept + Process	
ARTD 3480	Video: Sound and Image	
JRNL 1101	Journalism 1: Fundamentals of Reporting	
JRNL 3425	Public Relations Principles	
JRNL 3625	Public Relations Practice	

JRNL 3610	Digital Storytelling and Social Media
JRNL 5311	Design for Storytelling
JRNL 5314	Video News Reporting and Producing
JRNL 5316	The Newsroom
MSCR 1230	Introduction to Film Production
MSCR 2302	Advertising and Promotional Culture

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
MKTG 4504	Advertising and Brand Promotion	4
<b>Capstone</b>		
Complete one of the following:		4
STRT 4501	Strategy in Action	
COMM 4608	Strategic Communication Capstone	
COMM 4533	Consultation Skills	

### Business GPA Requirement

Minimum 2.000 GPA in business courses required

### Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1102 or COMM 1000	1	COMM 1112, 1113, or 2301	4	Communication studies elective	4	Elective	4
ACCT 1201	4	MGSC 2301	4	NUpath course	4	Elective	4
ENGW 1111	4	Communication studies foundation course	4				
COMM 1101	4	MKTG 2201	4				
MATH 1231	4						
		17		16		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
FINA 2201	4	COOP 3945	0	COOP 3945	0	Elective	4
BUSN 1103 or EEAM 2000	1					Elective	4
Business core option	4						
Communication studies cluster course	4						
ECON 1115 or 1116	4						
		17		0		0	



**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Business core option 1	4	COOP 3945	0	COOP 3945	0	Communication studies elective	4
MKTG 4504	4					NUpath course	4
Communication studies writing-intensive 1	4						
Concentration course	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Concentration course	4	Concentration course	4
Communication studies writing-intensive 2	4	COMM 4608, STRT 4501, or COMM 4533	4
Communication studies elective	4	COMM 3409, ENGW 3304, ENGW 3314, or ENGW 3315	4
Concentration course	4	Elective	4
	16		16

Total Hours: 130

## Computer Science and Communication Studies, BS

The computer science and communication studies combined major integrates practical skills and theory. Students will gain both a strong computer science foundation and a deep understanding of the major conceptual frameworks for human communication—plus how to apply this knowledge to solve problems in today's society.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1

CS 1210	Professional Development for Khoury Co-op	1
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### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4550	Web Development	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	12
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CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Communication Studies Courses

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	

COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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 courses in the following range: <sup>1</sup> 12  
 COMM 1131 to COMM 4996

<sup>1</sup> Special Topics in Communication Studies (COMM 4912), and Junior/Senior Honors Project 1 (COMM 4970) are excluded.

**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
COMM 3409	Advocacy Writing <sup>1</sup>	

<sup>2</sup> If Advocacy Writing (COMM 3409) is selected it will also satisfy a communication studies elective requirement. One additional general elective will be then required in its place.

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, IS

**Communication Studies GPA Requirement**

Minimum 2.000 GPA required in all COMM courses

**Program Requirement**

133 total semester hours required

**Plan of Study**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Elective	4
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4	Elective	4
CS 2500 and CS 2501	5	COMM 1112 or 2301	4				
ENGW 1111	4	Elective	4				
COMM 1101	4						
		19			17		
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	4					Elective	4
Khoury elective	4						
CS 3000	4						
Elective	4						
		17			0		
					0		
						8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1170	1	Co-op	0	Co-op	0	Elective	4
Communication studies cluster course	4					ENGW 3302 or 3315	4
Communication studies writing-intensive course	4						
Khoury elective	4						
Elective	4						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Khoury elective	4	CS 4500	4
Communication studies writing-intensive course	4	CS 4550	4
Communication studies elective	4	Communication studies elective	4
Computing and social issues	4	Communication studies elective	4
	16		16

Total Hours: 134

## Communication Studies and Speech-Language Pathology and Audiology, BS

The combined Bachelor of Science in Communication Studies and Speech-Language Pathology and Audiology offers an interdisciplinary approach to human communication and its disorders. Coursework focuses on the scientific and theoretical frameworks of speech, language, and hearing. Students will also be introduced to the fundamentals of communication theory, and they have an opportunity to acquire the practical skills necessary to thrive in a complex and changing society. The curriculum is enhanced by experiential learning opportunities in a clinical setting that prepare the students for a variety of professional careers.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**First-Year Seminar**

Code	Title	Hours
COMM 1000	Communication Studies at Northeastern	1
or SLPA 1000	College: An Introduction	

**Communication Studies Requirements**

Code	Title	Hours
No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.		

**Communication Studies Common Requirements**

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following:		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 (COMM 3201 is strongly recommended):		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 COMM courses.	12
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### Speech-Language Pathology and Audiology Requirements

Code	Title	Hours
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1200	Phonetics	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 2000 or EEAM 2000	Introduction to Co-op Professional Development for Co-op	1
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

### Supporting Courses

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4
ENGW 1111	First-Year Writing	4
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
HLTH 2100	Interprofessional Ethics for Individual and Population Health	4
PHTH 2300	Communication Skills for the Health Professions	4
PSYC 2320	Statistics in Psychological Research	4

### Integrative Course

Code	Title	Hours
COMM 3201 or COMM 4102	Health Communication (WI) Health Communication Campaigns	

### Plan of Study

#### Sample 4 Years, 2 Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or SLPA 1000	1	Communication studies foundation course	4	COMM 1112	4	Communication studies elective	4
COMM 1101	4	SLPA 1101	4	Communicati studies elective	4	General elective	4

BIOL 2217 and BIOL 2218	5	SLPA 1205	4				
PSYC 1101	4	BIOL 2219 and BIOL 2220	5				
ENGW 1111	4						
	18		17		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000 or SLPA 2000	1	Co-op	0	Co-op	0	Vacation	0
Communicati studies cluster course	4						
SLPA 1203	4						
PHYS 1145 and PHYS 1146	5						
SLPA 1103	4						
	18		0		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 3409 or ENGW 3306	4	PSYC 2320 or MATH 2280	4	Vacation or optional co-op #2	0	Vacation or optional co-op #2	0
Communicati studies elective	4	SLPA 1102	4				
PHTH 2300	4	Communication studies writing-intensive	4				
HLTH 2100 or PHIL 1165	4	SLPA 1200	4				
	16		16		0		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SLPA 5110	4	SLPA 4651	4				
SLPA 5107	4	SLPA 6219	4				
General elective	4	COMM 3201	4				
General elective	4	General elective	4				
	16		16				

Total Hours: 133

A general elective or a COMM elective (e.g., COMM 1120) can be taken to fulfill the NUpath Formal/Quantitative Reasoning (FQ) requirement.

### Health Science and Communication Studies, BS

The combined Bachelor of Science degree program in health science and communication studies offers an interdisciplinary approach to public health communication. Students combine courses from health sciences and communication studies to learn about health and illness and the important role of communication in shaping the public's understanding

of health issues. The interdisciplinary curriculum is enhanced by experiential learning opportunities and is designed to prepare students for challenging careers that involve crafting messages about health, developing strategies for promoting healthcare services, and specific applications such as disease awareness and prevention.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Communication Studies Major Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

Code	Title	Hours
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

Code	Title	Hours
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

Code	Title	Hours
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 additional communication studies courses.	12
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## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260	<i>The American Healthcare System</i>	4
or PHTH 1261	<i>Comparative Healthcare Systems</i>	
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300	Communication Skills for the Health Professions	4
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

Code	Title	Hours
<b>Life Sciences</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Other Requirements

Code	Title	Hours
<b>Intro to College</b>		
HSCI 1000	College: An Introduction	1
or COMM 1000	Communication Studies at Northeastern	
<b>Professional Development</b>		
HSCI 2000	Professional Development for Bouvé Co-op	1
or EEAM 2000	Professional Development for Co-op	
<b>Writing</b>		
ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions (or other Advanced Writing course)	4

<b>Electives</b>	<b>28</b>
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## Integrative Course

Code	Title	Hours
<b>Capstone</b>		
HSCI 4720	Health Science Capstone—Service	4

or HSCI 4730	Health Science Capstone—Research
or COMM 4102	Health Communication Campaigns
or COMM 4530	Communication and Quality of Life
or COMM 4603	Advocacy Workshop

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Communication Studies Major Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 1000 or COMM 1000	1	BIOL 1113	4	Public health core	4	Vacation	0
PHTH 1260	4	BIOL 1114	1	Elective	4		
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1112	1	Elective	4				
MATH 1241	4	ENGW 1111	4				
PSYC 1101	4						
	18		18		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	Co-op		Co-op		ENGW 3306	4
HSCI 2000 or EEAM 2000	1	Elective	4			Elective	4
COMM 1101	4						
COMM 1112 or 2301	4						
COMM elective	4						
	17		4		0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	Co-op		Co-op		Public health core	4
Foundation course	4	Elective	4			Public health core	4
Public health core	4						
Cluster course	4						
	16		4		0		8

Year 4			
Fall	Hours	Spring	Hours
Public health core	4	HSCI 4720, 4730, COMM 4102, COMM 4530, or COMM 4603	4
Elective	4	COMM elective	4
COMM WI course	4	COMM WI course	4
COMM elective	4	Elective	4
	16		16

Total Hours: 133

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

This is a sample plan of study.

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 1000 or COMM 1000	1	BIOL 1113	4	Vacation	0	Vacation	0
PHTH 1260	4	BIOL 1114	1				
PSYC 1101	4	ENGW 1111	4				
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1112	1	Elective	4				
MATH 1241	4						
	18		18		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	HSCI 2000 or EEAM 2000	1	Vacation	0	Co-op	0
Public health core	4	Public health core	4				
COMM 1101	4	Foundation course	4				
COMM 1112 or 2301	4	Elective	4				
		Cluster course	4				
	16		17		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3306	4	Vacation	0	Vacation	0
		Public health core	4				
		COMM electives	8				
	0		16		0		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 4202	4	Co-op		Co-op	0	Vacation	0



PHTH 4540	4			
COMM elective	4			
COMM WI course	4			
	16	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
PHTH 4120	4	HSCI 4720, 4730, COMM 4102, COMM 4530, or COMM 4603	4
HSCI 4700	0	Electives	12
COMM WI course	4		
Electives	8		
	16		16

Total Hours: 133

## Media and Screen Studies and Theatre, BS

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design with related studies in screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices of making theatre, film, and television as engaged citizens and creative artists.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirement Natural and Designed World (ND) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4

MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	

#### Foundation Course

Complete one of the following: 4

MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	

#### Diversity or Globalization Course

Complete one of the following: 4

MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	

#### Writing-Intensive

Complete two of the following: 8

MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Theatre Requirements

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

#### Theatre Texts and Context

Complete one of the following: 4

THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

#### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1

#### Intermediate or Advanced Technique

Complete two of the following: 8

THTR 2300	Classics of Global Theatre
THTR 2310	History of Musical Theatre
THTR 2315	Rebels of Modern Drama
THTR 2320	Classics of 20th-Century American Drama
THTR 2330	Playwriting
THTR 2340	Theatre and Society
THTR 2342	Acting 2
THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 2600	Voice and Speech for the Actor
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3—Playing Shakespeare
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2

**Integrative Requirement**

Code	Title	Hours
<b>Media and Screen Studies Capstone</b>		
MSCR 4623	Theories of Media and Culture	4
<b>Theatre Capstone</b>		
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**

**Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Electives	4
THTR 1101	4	THTR 1131	4				
THTR 1120	4	THTR 1270	4				
ENGW 1111	4						
		17			16		
					8		
						8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
THTR 2325	4						
THTR texts and context elective	4						
EEAM 2000	1						
THTR 1100	1						
		18			0	0	
						8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR writing-intensive	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
Intermediate or advanced technique elective	4						
THTR 2000	1						
Elective	4						
		17			0	0	
						8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR writing-intensive	4	MSCR 4623	4				
Intermediate or advanced technique elective	4	MSCR elective	4				
Elective	4	Elective	4				
THTR 4702	4	Elective	4				
		16			16		

Total Hours: 132

**Music and Communication Studies with Concentration in Music Industry, BS**

The Bachelor of Science in Music with Concentration in Music Industry, the first such undergraduate program offered in Boston, is designed for students with an interest in fields such as artist management; the music products industry; the recording industry; arts administration; contracting and legal issues; financial and economics aspects of the music industry; and broadcast, mobile, and online media technologies.

The Department of Communication Studies is committed to providing students with both the communication skills and the understanding of the communication process required to thrive in a complex and changing society. Majors are required to demonstrate a mastery of the fundamentals of effective communication, to learn the fundamentals of communication theory and practice, and to develop a distinct area

of emphasis. Some of the more popular areas include argumentation and advocacy, organizational and health communication, international and intercultural communication, digital communication and social media, and media production. The curriculum is designed to enhance the understanding of human communication in a variety of contexts, to empower students to become informed and engaged citizens, and to provide the knowledge and skills required to live a rich personal and professional life.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

### Music Industry Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MUSC 1000	Music at Northeastern	1
<b>Music Core</b>		
MUSC 1001	Music in Everyday Life	4
<b>Music Theory Placement</b>		
All students must take a theory placement exam. Students who do not place into MUSC 1201 must first take the following:		
MUSC 1119	Fundamentals of Western Music Theory	4
<b>Music Theory Requirement</b>		
MUSC 1201	Music Theory 1	4
<b>Introductory Music Industry</b>		
MUSI 1230	Introduction to Music Industry	4
<b>Music in Context</b>		
Choose one course from western tradition, ethnomusicology, or contemporary categories.		4
<i>Western Tradition</i>		
MUSC 2107	Introduction to Opera	
MUSC 2312	Historical Traditions: Classical	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 3352	Sounding Human	
MUSC 3470	War and Music	
<i>Ethnomusicology</i>		
MUSC 2101	Black Popular Music	

MUSC 2130	Music of Asia	
MUSC 2330	Musical Communities of Boston	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	
<i>Contemporary</i>		
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
<b>Music Industry Electives</b>		
Complete three of the following:		12
MUSC 2210	Introduction to Songwriting	
MUSC 2211	Advanced Songwriting	
MUSI 1204	Analyzing Popular Genres	
MUSI 2231	Music Licensing for Media	
MUSI 2232	Music Recording 1	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2341	Music Supervision 1	
MUSI 2540	Special Topics in Music Industry	
MUSI 3332	Artist Management	
MUSI 3333	The Record Industry	
MUSI 3334	Music Products Industry	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 4530	Music Entrepreneurship	
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	
MUST 1220	Introduction to Music Technology	
<b>Business Course</b>		
ACCT 1209	Financial Accounting and Reporting	4

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	

COMM 1225	Communication Theory
COMM 1255	Communication in a Digital Age
<b>Cluster Course</b>	
Complete one of the following: 4	
COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

<b>Writing-Intensive Courses</b>	
Complete two of the following: 8	
COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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

<b>Communication Studies Electives</b>	
Complete three COMM courses.	12

**Integrative Requirement**

Code	Title	Hours
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.		
		4-8

<b>Music Option</b>	
Complete one of the following:	
MUSI 4601	Seminar in Music Industry
MUSI 4530	Music Entrepreneurship
MUSI 5900	Ethnography in Creative Industries

<b>Communication Studies Option</b>	
Complete two of the following. One communication studies course is required:	
COMM 4608	Strategic Communication Capstone
or COMM 4625	Online Communities
MUSC 2000 to MUSC 5999	
MUSI 2000 to MUSI 5999	
MUST 2000 to MUST 5999	

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Music Industry Major Grade Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

Sample Four Years, Two Co-ops

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
MUSC 1000 or COMM 1000	1	ENGW 1111	4	Elective	4	Elective
MUSC 1001	4	MUSC 1201	4	Elective	4	Elective
MUSI 1230	4	Communication studies foundational course	4			
COMM 1101	4	Music in context elective	4			
COMM 1112 or 2301	4					
		17			16	8
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Communication studies cluster course	4	Communication studies elective	4	Elective	4	Co-op
Elective	4	Elective	4	Elective	4	
Music industry elective	4	Music industry elective	4			
Elective	4	Elective	4			
		EEAM 2000	1			
		16			17	8
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		ENGW 3314 or 3315	4	Communication studies elective	4	Co-op
		Communicati studies elective	4	Communicati studies writing-intensive	4	
		ACCT 1209	4			
		Elective	4			
		0			16	8

**Year 4**

Fall	Hours	Spring	Hours
Co-op		Communication studies writing-intensive	4
		Music industry elective	4
		Integrative course	4
		Capstone	4
	0		16

Total Hours: 130

**Political Science and Communication Studies, BS**

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following: 4		
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

<b>Methodology</b>		
POLS 2399	Research Methods in Political Science	4
or COMM 2301	Communication Research Methods	

<b>Political Science Upper-Division Electives</b>		
Complete two courses in the following range:		8
POLS 3300 to POLS 5999		

<b>Political Science Electives</b>		
Complete two courses in the following range:		8
POLS 2000 to POLS 5999		

**Political Science Concentration (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 185).

- American Political Institutions (p. 185)
- Campaigns and Elections (p. 185)
- Comparative Politics (p. )
- Identity, Culture, and Politics (p. 185)
- International Relations and Diplomacy (p. )
- Law and Legal Studies (p. 185)
- Public Policy (p. 185)
- Security Studies (p. )

**Communication Studies Requirements**

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Communication Studies Electives**

Code	Title	Hours
<b>Foundation course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

<b>Writing Intensive</b>		
Complete two writing intensive courses in communication studies.		8

COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	

COMM 3445	Public Relations Principles
COMM 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 additional Communication Studies courses. 12

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3320 or COMM 3320	Politics and Mass Media Political Communication	4

**Capstone Requirement**

Complete one of the following. This course also counts toward the political science or communication studies elective requirement: 4

COMM 4102	Health Communication Campaigns
COMM 4530	Communication and Quality of Life
COMM 4533	Consultation Skills
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities
COMM 4755	Production Capstone
POLS 4701	Political Science Senior Capstone
POLS 4703	Senior Thesis

**Political Science and Communication Studies Combined-Major Credit Requirement**

Complete 84 semester hours in the major.

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Program Requirement**

128 total semester hours required

**Concentrations**

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 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

### Argumentation and Law, Minor

The argumentation and law minor is intended for students contemplating law school, students interested in legal issues, or students in fields affected by law (such as journalism, strategic communication, or public policy). To prepare students for successful careers in these areas, this minor combines courses in argumentation, rhetoric, and law. Students are exposed to the principles of argumentation, the fundamentals of free speech, the basics of intellectual property, and issues related to privacy.

#### Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

#### Requirements

Code	Title	Hours
<b>Argumentation</b>		
Complete two of the following:		8
COMM 1120	Principles of Argumentation	
COMM 1210	Persuasion and Rhetoric	
COMM 2100	Elements of Debate	
COMM 3310	Rhetoric and Justice	
COMM 3311	Arguing Human Rights	
COMM 3409	Advocacy Writing	
<b>Law</b>		
Complete two of the following:		8
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 2501	Communication Law	
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
COMM 3308	Rhetoric and Propaganda	
COMM 3309	Rhetoric of Fascism	
COMM 3414	Great Speakers and Speeches	
COMM 3501	Free Speech: Law and Practice	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
LPSC 3307	Understanding the Modern Supreme Court	

#### GPA Requirement

2.000 GPA required in the minor

### Cinema Studies, Minor

The interdisciplinary cinema studies minor appeals to students aspiring to supplement their major program of study with courses that promote the study of film, television, and digital media. In addition to film analysis and film theory, students choose from electives on culture and film, film and television history, and gender and film. This results in a minor that combines the academic study of cinema along with the crafts of filmmaking and screenwriting.

#### Minor Requirements

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

Media and Screen Studies majors may not declare the cinema studies minor. Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

#### Requirements

Code	Title	Hours
MSCR 2895	Film Analysis	4
MSCR 3600	Film Theory	4

#### Electives

Code	Title	Hours
Complete three of the following:		12
ARTH 2212	Survey of the Still and Moving Image	
MSCR 2220	Understanding Media	
MSCR 2336	American Film and Culture	
MSCR 3389	Screenwriting	
MSCR 3392	Gender and Film	
MSCR 4208	TV History	
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 designed for students interested in acquiring practical skills along with a broad-based understanding of communication theory and research. This minor seeks to provide the knowledge necessary to understand the challenges and opportunities of a diverse and democratic society and the skills to perform effectively and ethically as citizens. Three electives offer students an opportunity to develop an area of expertise (such as strategic communication or media production) within the communication studies minor.

#### Minor Requirements

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

Communication studies majors may not declare the communication studies minor. Students must complete a minimum of three courses

exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Requirements

Code	Title	Hours
<b>Required Courses</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	
<b>Electives</b>		
Complete three of the following or any unused foundational courses from above:		12
COMM 1120 to COMM 4799		

## GPA Requirement

2.000 GPA required in the minor

### Digital Communications, Minor

The digital communications minor appeals to students interested in studying the relationship between communication, technology, and society. The minor offers students an opportunity to obtain the tools and methods for studying, analyzing, and critically reflecting upon their everyday engagements with digital forms of community and expression. Students pursuing the digital communications minor explore the ethical questions that sit at the core of the digital technologies that shape culture, politics, and the economy. Courses in the minor cover areas of digital communication such as social media, networks and organizing, internet policy and cybersecurity, online communities and collaboration, and children's development and new media.

## Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Requirements

Code	Title	Hours
<b>Foundational Courses</b>		
Complete two of the following:		8
COMM 1255	Communication in a Digital Age	
COMM 2105	Social Networks	
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
COMM 2625	Communication, Technology, and Society	
ENGL 1450	Reading and Writing in the Digital Age	
MSCR 2505	Digital Feminisms	
or WMNS 2505	Digital Feminisms	

## Advanced Courses

Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 4605	Youth and Communication Technology	
COMM 4625	Online Communities	

## GPA Requirement

2.000 GPA required in the minor

### Film Production, Minor

The interdisciplinary film production minor appeals to students interested in film production. This minor is particularly appealing to students studying art and art history, English, and theatre. In addition to a foundational course in film production, students take a combination of courses dealing with documentary filmmaking, film analysis, screenwriting, and storytelling. The film production minor is designed to prepare students for graduate school, careers in media production, and positions in the entertainment industry.

## Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Required Course

Code	Title	Hours
MSCR 1230	Introduction to Film Production	4

## Electives

Code	Title	Hours
Complete four of the following:		16
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
MSCR 2160	Narrative Filmmaking	
MSCR 2895	Film Analysis	
MSCR 3389	Screenwriting	
MSCR 3446	Documentary Production	
THTR 2345	Acting for the Camera	

## GPA Requirement

2.000 GPA required in the minor

### Human Communication, Minor

The human communication minor is intended for students interested in studying the role of interpersonal communication in relationships, including romantic relationships, friendships, and relationships in groups or in organizations. Successful students gain an in-depth understanding of how communication can affect the quality of relationships, the satisfaction that is derived from relationships, and whether a relationship is likely to last or dissolve. Courses in the minor focus on research-validated theories, concepts, and models that aid students in understanding the many different types of relationships that exist in their personal and professional lives.

## Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Foundational Courses

Code	Title	Hours
Complete two of the following:		8
COMM 1131	Sex, Relationships, and Communication	
COMM 1231	Principles of Organizational Communication	
COMM 2131	Dark Side of Interpersonal Communication	
COMM 2135	Sex and Interpersonal Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2500	Analyzing Conversations in Everyday Life	
COMM 2534	Group Communication	
COMM 2535	Family Communication	

## Advanced Courses

Code	Title	Hours
Complete two of the following:		8
COMM 2301	Communication Research Methods	
COMM 3230	Interpersonal Communication	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	

## GPA Requirement

2.000 GPA required in the minor

### Media and Screen Studies, Minor

The media and screen studies minor appeals to students interested in how media shapes society and is designed to prepare students for careers in arts and industry, politics, and popular culture. The minor offers students an opportunity to obtain the analytical skills necessary for the rigorous analysis of media within the humanities and social sciences. Students with a media and screen studies minor often find employment in film and television production, media marketing, film/media journalism, and other positions within the entertainment industry.

## Minor Requirements

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

Media and screen studies majors may not declare the media and screen studies minor. Students must complete a minimum of three (3) courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Required Courses

Code	Title	Hours
MSCR 1220	Media, Culture, and Society	4
MSCR 2220	Understanding Media	4

## Electives

Code	Title	Hours
Complete three courses in the following range:		12
MSCR 2000 to MSCR 4999		

## GPA Requirement

2.000 GPA required in the minor

### Media Production, Minor

The media production minor is designed to foster an awareness of the important cultural, rhetorical, and critical contexts of media development. Successful students develop creative and artistic abilities through studying contemporary practices and standards and developing original creative work. The technical aspects of camera operation, audio design, lighting design, digital editing, and live broadcast are also covered.

## Minor Requirements

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Required Courses

Code	Title	Hours
COMM 1450	Sound Production for Digital Media	4
COMM 2350	Producing for the Entertainment Industry	4
COMM 2550	Television Field Production	4
COMM 2655	Television Studio Production	4

## Elective Courses

Code	Title	Hours
Complete two of the following:		8
COMM 2650	The Business of Entertainment	
COMM 2750	Beyond Television	
COMM 3307	Production Practicum Abroad	
COMM 3450	Voice-Over Artist	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	
COMM 4940	Special Topics in Media Production	

## GPA Requirement

2.000 GPA required in the minor

### Oratory and Public Speaking, Minor

The oratory and public speaking minor is designed for students aspiring to develop exemplary oral communication skills. The courses that comprise the minor provide a coherent program of study that includes

the principles of argumentation, the practice of public speaking, and the theory of narrative and storytelling.

### Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Foundational Course

Code	Title	Hours
COMM 1112	Public Speaking	4

### Electives

Code	Title	Hours
Complete four of the following:		16
COMM 1113	Business and Professional Speaking	
COMM 1210	Persuasion and Rhetoric	
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 1511	Communication and Storytelling	
COMM 2100	Elements of Debate	
COMM 2113	Interviewing	
COMM 3450	Voice-Over Artist	

### GPA Requirement

2.000 GPA required in the minor

### Political Communication, Minor

The political communication minor is a joint program offered through the departments of communication studies, political science, and journalism. The minor appeals to students interested in the electoral process, campaign rhetoric, and the role of media in political life. It is intended to address the interests and needs of students considering careers in the political sphere, either as candidates, employees, volunteers, or reporters in political organizations and campaigns. The political communication minor is designed to prepare students for careers in communication, law, politics, public administration, public policy, and other professions that deal with issues in public settings.

### Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Introductory Courses

Code	Title	Hours
Complete two of the following:		8
COMM 1210	Persuasion and Rhetoric	
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 1412	Social Movement Communication	

JRNL 1150 Understanding Today's News

POLS 1150 American Government

### Intermediate/Advanced Courses

Complete four courses from the following lists. At least one course must be taken from each department: 16

Communication Studies	
COMM 3320	Political Communication
COMM 3409	Advocacy Writing
COMM 3610	Communication, Politics, and Social Change
COMM 4602	Contemporary Rhetorical Theory

Journalism	
JRNL 2350	The History of Journalism: How the News Became the News
JRNL 3550	The First Amendment and the Media

Political Science	
POLS 3310	Public Opinion, Voting, and Elections

### GPA Requirement

2.000 GPA required in the minor

### Professional Presentation, Minor

The professional presentation minor is intended for students interested in integrating the creativity of actor training and the practical techniques of public speaking. Students are offered an opportunity to create an individualized course of study to empower their voice and speech, cultivate an onstage persona, and develop high-impact presentation skills to enhance career prospects. This minor, which features classes offered by the Department of Theatre and the Department of Communication Studies, seeks to create more confident, creative, and compelling communicators.

### Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared minor(s) and additional minor(s).

### Presentation Requirements

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 Requirements

Code	Title	Hours
Complete two of the following:		8
THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	

THTR 1160	The Professional Voice
THTR 2345	Acting for the Camera

### GPA Requirement

2.000 GPA required in the minor

#### Rhetoric, Minor

The rhetoric minor appeals to students interested in history, theory, and the criticism of civic discourse and cultural practices. The minor integrates courses from the Department of Communication Studies and the Department of English that explore the nature and function of rhetoric in politics, the professions, and the media. The rhetoric minor offers students an opportunity to be better citizens, members of the community, and leaders in the workplace by learning how to use language strategically, to speak with integrity, and to appreciate the power of their own voice.

### Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Foundational Course

Code	Title	Hours
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
ENGL 1160	Introduction to Rhetoric	

### Electives

Code	Title	Hours
Note: For English majors, only one course from the major may also count toward this elective section of the minor.		
Complete four of the following:		16
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3501	Free Speech: Law and Practice	
COMM 4602	Contemporary Rhetorical Theory	
ENGL 3325	Rhetoric of Law	
ENGL 3381	The Practice and Theory of Teaching Writing	

### GPA Requirement

2.000 GPA required in the minor

#### Social Activism, Minor

The social activism minor appeals to students interested in exploring a variety of perspectives and practical approaches to social activism. The minor allows students to explore social movements, public advocacy, and citizenship in a wide array of situations. These opportunities arise from the wealth of advocacy organizations in Boston, the access Northeastern students have to co-op experiences nationally and internationally, and Northeastern's service-learning program. Completing course work in

a variety of departments provides an interdisciplinary perspective and allows students to apply different skill sets and knowledge bases for careers as lawyers, nonprofit activists, community organizers, lobbyists, and volunteers.

### Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Introductory Courses

Code	Title	Hours
Note: Only one course may be taken from each department/program.		
Complete two of the following:		8
<b>Communication Studies</b>		
COMM 1412	Social Movement Communication	
<b>Political Science</b>		
POLS 1150	American Government	
<b>Sociology</b>		
SOCL 1228	Social Problems	
SOCL 1246	Environment and Society	
<b>Theatre</b>		
THTR 1215	Activism and Performance	

### Intermediate/Advanced Courses

Code	Title	Hours
Note: Only one course may be taken from each department/program.		
Complete three of the following:		12
<b>Law and Public Policy</b>		
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
<b>Political Science</b>		
POLS 2395	Environmental Politics and Policy	
<b>Sociology</b>		
SOCL 2268	Social Movements	
<b>Service-Learning</b>		
Code	Title	Hours
POLS 2360	Politics of Poverty	4

### GPA Requirement

2.000 GPA required in the minor

#### Sports, Media, and Communication, Minor

The sports, media, and communication minor appeals to students preparing for careers as sports journalists or advertising/public relations professionals specializing in a sports-related area. The minor includes courses examining the prominent role of sports in society with a special emphasis on gender, race, and public policy. When combined with Northeastern's signature co-op program, the result is an innovative minor



that blends theory with practice and prepares students for a broad range of professional opportunities.

### Program Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

### Foundational Course

Code	Title	Hours
COMM 2110	Sports, Media, and Communication	4

### Electives

Code	Title	Hours
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#### Sports Elective

Complete one of the following: 4

COMM 2700	Sports Promotion in the 21st Century
JRNL 3455	Sports Writing

#### Intermediate Elective

Complete one of the following: 4

ANTH 2365	Sport, Culture, and Society
COMM 1450	Sound Production for Digital Media
COMM 2550	Television Field Production
COMM 2350	Producing for the Entertainment Industry
COMM 2655	Television Studio Production
COMM 2800	Sport and Spectacle
COMM 3451	Advertising Practices
ECON 3481	Economics of Sports

#### Advanced Elective

Complete one of the following: 4

COMM 4631	Crisis Communication and Image Management
COMM 4994	Internship in Communication
JRNL 3945	Internship
JRNL 4650	Ethics and Issues in Journalism
JRNL 5310	Photojournalism
JRNL 5314	Video News Reporting and Producing

### GPA Requirement

2.000 GPA required in the minor

### School of Journalism

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

**Jonathan Kaufman, MA**

Professor and Director

102 Lake Hall  
617.373.3236  
617.373.8773 (fax)

For more information contact:

Susan Conover, Academic Coordinator, [s.conover@northeastern.edu](mailto: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.

### Programs

#### Bachelor of Arts (BA)

- Journalism (p. 191)
- Journalism and English (p. 193)
- Journalism and Political Science (p. 195)
- Media and Screen Studies and Journalism (p. 158)

#### Bachelor of Science (BS)

- Computer Science and Journalism (p. 199)
- Criminal Justice and Journalism (p. 201)
- Data Science and Journalism (p. 203)
- Journalism and Interaction Design (p. 114)

### Minors

- Journalism Practice (p. 207)
- Journalism Studies (p. 208)
- Photojournalism (p. 132)
- Sport, Media, and Communication (p. 190)

### 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. 46).



## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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
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

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 three journalism electives. 12

### Journalism-Related Requirement

HIST 1130	Introduction to the History of the United States	4
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## Journalism Major Credit Requirement

Complete 49 semester hours in the major.

## Upper-Division Electives

Complete three general electives numbered 3000 or above that do not double-count with the major or NUpath.

## Program Requirement

129 total semester hours required

## Plan of Study

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000	1	JRNL 2201	4	Elective	4	Elective	4
JRNL 1101 and JRNL 1102	5	Foreign language	4	Elective	4	Elective	4
JRNL 1150	4	Elective	4				
ENGW 1111	4	Elective	4				
HIST 1130	4						
		18	16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2350	4	JRNL 2301	4	Elective	4	Co-op	0
Journalism elective 1	4	Journalism elective 2	4	Elective	4		
Foreign language	4	EEAM 2000	1				
Elective	4	Foreign language	4				
		Elective	4				
		16	17		8		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	16		8		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	JRNL 4650	4				
		Journalism elective 3	4				
		Elective	4				
		Elective	4				
		0	16				

Total Hours: 131

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000	1	JRNL 2201	4	Elective	4	Elective	4
JRNL 1101 and JRNL 1102	5	Foreign language	4	Elective	4	Elective	4
JRNL 1150	4	Elective	4				
ENGW 1111	4	Elective	4				
HIST 1130	4						
		18	16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2350	4	Co-op	0	Co-op	0	Elective	4
Journalism elective 1	4					Elective	4
EEAM 2000	1						
Foreign language	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	Elective	4
Journalism elective 2	4					Elective	4
Foreign language	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
JRNL 3550	4	JRNL 4650	4
JRNL 3610	4	Journalism elective 3	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 131

**Journalism and English, BA**

The School of Journalism and the English Department offer an interdisciplinary combined major in Journalism and English. Broadly speaking, students in the Combined Major in Journalism and English at Northeastern integrate the study of journalism with the study of language, literature and writing.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Creative Expression/Innovation (EI), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirements Interpreting Culture (IC), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

**Journalism Major Requirements**

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Law and Ethics</b>		
JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses		12

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Writing Studies	4
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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/JWSS 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 4000 Topics in Early Literatures

ENGL 4020 Topics in 17th- and 18th-Century Literatures

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following: 4

ENGL 2330 The American Renaissance

ENGL 3720 19th-Century Major Figure

ENGL 4040 Topics in 19th-Century Literatures

ENGL 2301 The Graphic Novel

ENGL 2440 The Modern Bestseller

ENGL 2600 Irish Literary Culture (Abroad)

ENGL 2610 Contemporary Israeli Literature and Art (Abroad)

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature

ENGL 3730 20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140 Grammar: The Architecture of English

ENGL 1160 Introduction to Rhetoric

ENGL 1410 Introduction to 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 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 1450 Reading and Writing in the Digital Age

ENGL 1502 American Literature to 1865

ENGL 1503 American Literature 1865 to Present

ENGL 2150 Literature and Digital Diversity

ENGL 2380 The Modern Novel

ENGL 2420 Contemporary Poetry

ENGL 2430 Contemporary Fiction

ENGL 2450 Postcolonial Literature

ENGL 2451 Postcolonial Women Writers

ENGL 2455 American Women Writers Race

ENGL 2460 Multiethnic Literatures of the U.S.

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 3487 Film and Text (Abroad)

ENGL 3582 Children's Literature

ENGL 3663 The African-American Novel

ENGL 3676 Representing Gender and Sexuality in Literature

### Writing

Complete one of the following: 4

ENGL 2700 Creative Writing

ENGL 2710 Style and Editing

ENGL 2740 Writing and Community Engagement

ENGL 2760 Writing in Global Contexts

ENGL 2770 Writing to Heal

ENGL 2780 Visual Writing: Writing Visuals

ENGL 2850 Writing for Social Media: Theory and Practice

ENGL 3375 Writing Boston

ENGL 3376 Creative Nonfiction

ENGL 3377 Poetry Workshop

ENGL 3378 Fiction Workshop

ENGL 3380 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

### 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 Four Years, Two Co-ops**

**SPRING/SUMMER 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000 or ENGL 1000	1	JRNL 2201	4	Foreign language	4	Foreign language	4
JRNL 1101 and JRNL 1102	5	ENGL 1160 or 1410	4	Elective	4	Elective	4
JRNL 1150	4	English diversity requirement	4				
ENGW 1111	4	Pre-nineteenth-century literature requirement	4				
ENGL 1400	4						
	18		16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3630	4	Co-op	0	Co-op	0	Elective	4
EEAM 2000 or EESH 2000	1					Elective	4
Nineteenth-century, twentieth-, and twenty-first-century literature requirement	4						
Theories and methods requirement	4						
Elective	4						
	17		0		0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2301	4	Co-op	0	Co-op	0	English elective 1	4
Journalism elective 1	4					Elective	4
Comparative literature requirement	4						
English writing requirement	4						
	16		0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3610	4	JRNL 3550 or 4650	4				
Journalism elective 2	4	Journalism elective 3	4				

ENGL 2740 or 2850	4	ENGL 4710	4		
English elective 2	4	Elective	4		
	16		16		0

Total Hours: 131

**Journalism and Political Science, BA**

This interdisciplinary combined major offers students an opportunity to integrate the study and practice of journalism and political science. Successful students will gain a deep understanding of both disciplines, allowing them to seek out areas such as political writing, campaigns, and law school.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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. 757).

**Journalism Major Requirements**

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Ethics</b>		
JRNL 4650	Ethics and Issues in Journalism	4

**Journalism Electives**

Take three JRNL courses. 12

**Political Science Requirements**

Code	Title	Hours
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**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**

Complete one of the following: 4

POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Capstone or Thesis**

Complete one of the following: 4

POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Political Science Electives**

Complete three POLS electives or complete a concentration from the following list: 12

POLS 2000 to POLS 5999

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American political institutions (p. 196)
- Campaigns and elections (p. 196)
- Comparative politics (p. 196)
- Identity, culture, and politics (p. 197)
- International relations and diplomacy (p. 197)
- Law and legal studies (p. 197)
- Public policy (p. 197)
- Security studies (p. 197)

**Integrative Requirement**

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
COMM 3320 or POLS 3320	Political Communication Politics and Mass Media	4

**Journalism and Political Science Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Program Requirement**

129 total semester hours required

**Concentrations**

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study  
Sample 4 Years, 2 Co-ops  
Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000	1	JRNL 2201	4	Foreign language	4	Foreign language	4
JRNL 1101 and JRNL 1102	5	POLS 1155	4	Elective	4	Elective	4
JRNL 1150	4	POLS 1160	4				
POLS 1150	4	Foreign language	4				
ENGW 1111	4						
		18		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3550	4	JRNL 2301	4	Elective	4	Co-op	0
Journalism elective 1	4	Journalism elective 2	4	Elective	4		
POLS 2399	4	POLS 2400	4				
Political science elective 1	4	Political science elective 2	4				
		EEAM 2000 or EESH 2000	1				
		16		17		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	JRNL 3610	4	Elective	4	Co-op	0
		Journalism elective 3	4	Elective	4		
		Political thought requirement	4				



	Political science elective 3	4			
	0	16	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	JRNL 4650	4		
		POLS 4701 or 4703	4		
		POLS 3320 or COMM 3320	4		
		Elective	4		
	0	16		0	

Total Hours: 131

## Media and Screen Studies and Journalism, BA

A Bachelor of Arts in Journalism and Media and Screen Studies is designed for the student who is interested in pursuing a career as a journalist specializing in the film industry.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320 or MSCR 1420	Media and Social Change Media History	4
<b>Foundation Course</b>		
Complete one of the following:		4

MSCR 1230	Introduction to Film Production
MSCR 2220	Understanding Media
<b>Diversity or Globalization Course</b>	
Complete one of the following:	
MSCR 3392	Gender and Film
MSCR 2325	Global Media
MSCR 2505	Digital Feminisms
MSCR 3437	Media and Identity
<b>Writing-Intensive</b>	
Complete two of the following:	
MSCR 2505	Digital Feminisms
MSCR 3600	Film Theory
MSCR 3420	Digital Media Culture
MSCR 3422	Media Audiences
MSCR 4208	TV History

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Journalism Requirements

Code	Title	Hours
<b>Journalism Foundations</b>		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox (A grade of C or higher is required)	5
JRNL 1150	Understanding Today's News	4
JRNL 2201	Journalism 2: Intermediate Reporting (A grade of C or higher is required)	4

### Journalism and Advanced Writing

JRNL 2301	Visual Storytelling in Journalism (A grade of C or higher is required)	4
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### Television News

JRNL 5314	Video News Reporting and Producing	4
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### Ethics and Issues

JRNL 4650	Ethics and Issues in Journalism	4
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### Journalism Electives

Complete three courses in the following range:		12
JRNL 2000–JRNL 5999		

### Integrative Requirement

The following course also counts toward the media and screen studies requirements above.

Code	Title	Hours
<b>Integrative Course</b>		
MSCR 4623	Theories of Media and Culture	4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

### Program Requirement

129 total semester hours required

### Plan of Study

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000 or JRNL 1000	1	MSCR 1230 or 2220	4	Foreign language	4	Foreign language	4
MSCR 1220	4	MSCR 1320 or 1420	4	Elective	4	Elective	4
JRNL 1101 and JRNL 1102	5	JRNL 2201	4				
JRNL 1150	4	Foreign language	4				
ENGW 1111	4						
		18		16		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Co-op	0	Co-op	0	Elective	4
MSCR elective 1	4					Elective	4
MSCR diversity or globalization	4						
JRNL 2301	4						
Journalism elective 1	4						
		17		0		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 4623	4	Co-op	0	Co-op	0	Elective	4
MSCR writing intensive 1	4					Elective	4
JRNL 5314	4						
Journalism elective 2	4						
		16		0		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR elective 2	4	MSCR elective 3	4				
MSCR writing intensive 2	4	Elective	4				
JRNL 4650	4	Elective	4				

Journalism elective 3	4	Elective	4
		16	
		16	

Total Hours: 131

### Computer Science and Journalism, BS

The computer science and journalism combined major supports students who understand that journalism now takes place in both print and the digital world. Students will learn the principles, practices, and responsibilities of the journalism profession while gaining a deep understanding of the systems and technologies that support digital media.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4200 or IS 4300	Information Retrieval Human Computer Interaction	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 12

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
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### Journalism Courses

A grade of C or higher is required:

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

### Required Journalism

JRNL 1150	Understanding Today's News	4
JRNL 2350	The History of Journalism: How the News Became the News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

### Journalism Electives

Complete two JRNL courses. 8

### Journalism-Related Requirement

HIST 1130	Introduction to the History of the United States	4
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## Supporting Courses

Code	Title	Hours
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### Mathematics Requirement

MATH 1341	Calculus 1 for Science and Engineering	4
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### Computing and Social Issues

Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	
SOCL 3485	Environment, Technology, and Society	

## Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
<i>This course already fulfills a Journalism requirement above</i>		
JRNL 2301	Visual Storytelling in Journalism	

## Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Interpreting Culture
- Engaging Difference and Diversity
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

## Journalism GPA Requirement

Minimum 2.000 GPA required in all JRNL courses

## Program Requirement

134 total semester hours required

## Plan of Study

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

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0		
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4				
CS 2500 and CS 2501	5	JRNL 2201	4						
JRNL 1101 and JRNL 1102	5	ENGW 1111	4						
JRNL 1150	4								
		20			17			8	0
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
CS 1210	1	Co-op		Co-op		Elective	4		
CS 3000	4					Elective	4		

Khoury elective	4				
JRNL 2350	4				
HIST 1130	4				
	17		0	0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective	4	Co-op		Co-op		Elective	4
Khoury elective	4					Elective	4
JRNL 2301	4						
Journalism elective 1	4						
THTR 1170	1						
	17		0	0			8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4500 and CS 4501	4	JRNL 4650	4	Elective		4	
JRNL 3610	4	Computing and social issues	4	Elective		4	
JRNL 3550	4	Journalism elective 2		4			
IS 4200	4	Elective		4			
	16		16		8		0

Total Hours: 135

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		0	Vacation
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	JRNL 2201	4				
JRNL 1101 and JRNL 1102	5	ENGW 1111	4				
JRNL 1150	4						
	20		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op		0	Co-op		0
CS 3500	4						
MATH 1341	4						
JRNL 2350	4						
HIST 1130	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
						0	Elective
							4

Khoury elective	4		Elective	4
JRNL 2301	4			
Journalism elective 1	4			
THTR 1170	1			
	17		0	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective	4	Co-op		0	Co-op		0
JRNL 3550	4					Elective	4
JRNL 3610	4						
Elective	4						
	16		0	0			8

**Year 5**

Fall	Hours	Spring	Hours
Khoury elective	4	CS 4000	1
JRNL 4650	4	CS 4500 and CS 4501	4
IS 4200	4	Computing and social issues	4
Journalism elective 2	4	Elective	4
		Elective	4
	16		17

Total Hours: 136

**Criminal Justice and Journalism, BS**

The School of Criminology and Criminal Justice and School of Journalism offer a combined major in criminal justice and journalism. Criminology and criminal justice courses provide a foundation for understanding crime and our criminal justice system. Journalism courses provide students with the skills and experience needed to succeed as a journalist. Together, the combined major prepares students to report important stories about crime and justice.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Criminal Justice Requirements

Code	Title	Hours
<b>Criminal Justice Required Courses</b>		
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	Analyzing and Using Data on Crime and Justice	4
<b>Capstone</b>		
CRIM 4949	Senior Capstone Seminar	4
<b>Thematic Elective</b>		
Complete one course in the following range:		4
CRIM 1300 to CRIM 1500		
<b>Survey Elective</b>		
Complete one course in the following range:		4
CRIM 3010 to CRIM 3500		
<b>System-Wide Elective</b>		
Complete one course in the following range:		4
CRIM 4010 to CRIM 4040		
<b>Criminal Justice Elective</b>		
Complete one additional CRIM course.		4

## Journalism Requirements

Code	Title	Hours
<b>Introductory Journalism Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundation Courses</b>		
A grade of C or better is required.		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Ethics</b>		
JRNL 4650	Ethics and Issues in Journalism	4

## Journalism Electives

Code	Title	Hours
Complete three additional journalism courses.		12

## Supporting Courses

Code	Title	Hours
<b>Introduction</b>		
CRIM 1000 or JRNL 1000	Criminal Justice at Northeastern or Journalism at Northeastern	1
<b>Computer or Data Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
JRNL 3700	Data Storytelling

## Co-op Integration Requirements

Complete before the first co-op:

EESH 2000 or EEAM 2000	Professional Development for Co-op
	Professional Development for Co-op

Complete after a criminal justice co-op:

CRIM 3000	Co-op Integration Seminar 2
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## Integrative Requirements

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
CRIM 1700	Crime, Media, and Politics	4

## Program Requirement

129 total semester hours required

## Plan of Study Four Years, Two Co-ops Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000 or JRNL 1000	1	CRIM thematic elective	4	Elective	4	Elective	4
CRIM 1100	4	JRNL 2201	4	Elective	4	Elective	4
JRNL 1150	4	Computer or data requirement	4				
JRNL 1101 and JRNL 1102	5	Elective	4				
ENGW 1111	4						
		18	16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 2100	4	Co-op		Co-op		CRIM survey elective	4
CRIM 2200	4					Elective	4
JRNL 3550	4						
Journalism elective 1	4						
EESH 2000 or EEAM 2000	1						
		17	0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1700	4	Co-op		Co-op		Elective	4
CRIM 3600	4					Elective	4
JRNL 2301	4						
Journalism elective 2	4						

CRIM 3000	1			
	17	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
CRIM 3700	4	CRIM 4949	4	
CRIM system-wide elective	4	CRIM elective	4	
JRNL 3610	4	JRNL 4650	4	
Journalism elective 3	4	Elective	4	
	16		16	

Total Hours: 132

## Data Science and Journalism, BS

The data science and journalism combined major offers students an opportunity to gain the skills to be able to engage in both the print and digital worlds of journalism. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data. Combined with learning the principles, practices, and responsibilities of journalism, students can extract meaning from massive information flows and utilize it in effective investigative reporting.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4

<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4

<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1

### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
<b>Journalism Courses</b>		
A grade of C or higher is required:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

<b>Required Journalism</b>		
JRNL 1150	Understanding Today's News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

<b>Journalism Electives</b>		
Complete three JRNL courses.		12

### Supporting Courses

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4

<b>Statistics Foundation</b>		
ECON 2350	Statistics	4



### Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

#### Advanced Writing in the Disciplines

*This course already fulfills a Journalism requirement above.*

JRNL 2301	Visual Storytelling in Journalism	
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#### Computing and Social Issues

Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Integrative Requirement

Code	Title	Hours
Complete one of the following: 4		
JRNL 3700	Data Storytelling	
JRNL 5500	Coding for Digital Storytelling	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

### Journalism GPA Requirement

Minimum 2.000 GPA required in all JRNL courses

### Program Requirement

134 total semester hours required

### Plan of Study

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4		
CS 2500 and CS 2501	5	JRNL 2201	4				
JRNL 1101 and JRNL 1102	5	ENGW 1111	4				
JRNL 1150	4						
		20		17		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2301	4	CS 1210	1	ECON 2350	4	Co-op	
JRNL 3700 or 5500	4	DS 3000	4	Elective	4		
JRNL elective 1	4	DS 4200	4				
Computing and social issues	4	JRNL 3550	4				
		JRNL 3610	4				
		16		17		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	Elective	4	Co-op	
		Khoury elective	4	Elective	4		
		JRNL 4650	4				
		THTR 1170	1				
		JRNL elective 2	4				
		0		17		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Elective	4		
		DS 4900	4	Elective	4		
		CY 4170	4				
		JRNL elective 3	4				
		0		16		8	

Total Hours: 135

#### Sample Pattern, Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				

CS 2500 and CS 2501	5	JRNL 2201	4		
JRNL 1101 and JRNL 1102	5	ENGW 1111	4		
JRNL 1150	4				
	20		17	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation		Co-op	0
MATH 1341	4	JRNL 2301	4				
JRNL 3700 or 5500	4	JRNL 3610	4				
Computing and social issues	4	JRNL elective	4				
		CS 1210	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	ECON 2350	4	Co-op	
		DS 4300	4	Elective	4		
		JRNL 3550	4				
		JRNL elective	4				
		THTR 1170	1				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Elective	4	Co-op	
		Khoury elective	4	Elective	4		
		JRNL 4650	4				
		JRNL elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		DS 4900	4
		CY 4170	4
		Elective	4
		Elective	4
	0		16

Total Hours: 135

**Journalism and Interaction Design, BS**

The School of Journalism and the Department of Art and Design offer an interdisciplinary combined major in journalism and interaction design. Broadly speaking, students in the combined major in journalism and interaction design at Northeastern integrate the study of journalism with the study of art and design.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), Difference and Diversity (DD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirement Analyzing and Using Data (AD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

**Introduction to College**

Code	Title	Hours
JRNL 1000 or ARTF 1000	Journalism at Northeastern Art and Design at Northeastern	1

**Journalism Major Requirements**

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Law and Ethics</b>		
JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses		12

**Art and Design Core**

Code	Title	Hours
<b>Art and Design Fundamentals</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4
<b>Art and Design History</b>		
Complete two of the following:		8

ARTH 1111	Global Art and Design History: Renaissance to Modern
ARTH 2210	Modern Art and Design History
ARTH 2215	History of Graphic Design

### Design Requirements

Code	Title	Hours
<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2260	Programming Basics	4
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Degree Project</b>		
Complete one of the following:		8
ARTG 4550	Design Degree Project 1	
ARTG 4700	Interaction Team Degree Project 1	

### Design Elective

Code	Title	Hours
Complete one of the following:		
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	4
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (with optional ARTF 1125)	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3450	Graphic Design 2	
ARTG 3460	Identity and Brand Design	
ARTG 4552	Information Design 2	
ARTG 4553	Environmental Information Design	
ARTG 4554	Typography 3	

### Integrative Requirements

Code	Title	Hours
JRNL 5311	Design for Storytelling	4
Complete one of the following:		
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
JRNL 1000 or ARTF 1000	1	JRNL 1101 and JRNL 1102	5	Elective	4	Vacation
JRNL 1150	4	ARTF 2223 (with optional ARTF 2224)	4	Elective	4	
ENGW 1111	4	ARTG 2250 (with optional ARTG 2251)	4			
ARTG 1250	4	Elective	4			
ARTF 1122 (with optional ARTF 1123)	4					
		17	17	8		0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
JRNL 2201	4	Co-op 1	4	Co-op 1	4	Vacation
EEAM 2000	1					
Art + design history elective 1	4					
ARTG 2260	4					
Elective	4					
		17	0	0		0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
JRNL 2301	4	Co-op 2	4	Co-op 2	4	Elective
Journalism elective 1	4					ENGW 3302
ARTG 2400 (with optional ARTG 2401)	4					
ARTG 3350	4					
		16	0	0		8
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
JRNL 3610	4	Co-op 3	4	Co-op 3	4	Vacation
Journalism elective 2	4					
Art + design history elective 2	4					
ARTG 3700	4					
		16	0	0		0
Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
JRNL 5311	4	Journalism elective 3	4			

JRNL 3550 or 4650	4 ARTG 4551 or 4701	4
ARTG 3451	4 Art + design elective	4
ARTG 4550 or 4700	4 Elective	4
		16

Total Hours: 131

### Sample Five Years, Three Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000 or ARTF 1000	1	JRNL 1101 and JRNL 1102	5	Vacation		Vacation	
JRNL 1150	4	ARTF 2223 (with optional ARTF 2224)	4				
ENGW 1111	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4	Elective	4				
ARTF 1122 (with optional ARTF 1123)	4						
		17	17	0	0		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2201	4	JRNL 2301	4	Vacation		Vacation	
EEAM 2000	1	Journalism elective 1	4				
Art + design history elective 1	4	ARTG 2400 (with optional ARTG 2401)	4				
ARTG 2260	4	ARTG 3350	4				
Elective	4						
		17	16	0	0		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours
JRNL 3610	4	Co-op 1		Co-op 1	
Journalism elective 2	4				
Art + design elective	4				
ARTG 3700	4				
		16	0	0	

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours
JRNL 3550 or 4650	4	Co-op 2		Co-op 2	
Art + design history elective 2	4				
Elective	4				

ENGW 3302	4		
		16	0
		0	0
<b>Year 5</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
JRNL 5311	4	Journalism elective 3	4
ARTG 3451	4	ARTG 4551 or 4701	4
ARTG 4550 or 4700	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 131

### Journalism Practice, Minor

With the explosion of websites, podcasts, and social media, more and more people find themselves using the skills of a journalist in the dissemination of information in both their private and professional lives. This minor is intended for those students who wish to bring more professionalism and sophistication to the things they post online or who hope to offer a skill set that will make them more versatile and employable in their chosen field. It will also serve those who may be considering a career in journalism but find themselves too late in their college careers to switch majors.

### Minor Requirements

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

*Note:* Any student wishing to satisfy a minor in both journalism studies and journalism practice must take eight unique courses. No double counting. Journalism majors are not eligible for a minor in journalism practice.

### Required Courses

Code	Title	Hours
<b>Required Courses</b>		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
<b>Restricted Elective</b>		
Complete one course from the following:		
JRNL 3610	Digital Storytelling and Social Media	4
JRNL 3625	Public Relations Practice	
JRNL 3630	Magazine Writing	
JRNL 3680	Advanced Reporting	
JRNL 5310	Photojournalism	
JRNL 5311	Design for Storytelling	
JRNL 5314	Video News Reporting and Producing	
JRNL 5360	Global Reporting	

**Elective**  
Complete one additional JRNL course. 4

**GPA Requirement**

2.000 GPA required in the minor

**Journalism Studies, Minor**

With an ever-growing array of information options available, and with the news media making news in the early days of the new administration in Washington, interest in the workings of journalism has never been higher. This minor is intended for those students who wish for a sophisticated media literacy, an understanding of the field that goes deeper than what can be gained in our popular Understanding Today's News course.

**Minor Requirements**

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

*Note:* Any student wishing to satisfy a minor in both journalism studies and journalism practice must take eight unique courses. No double counting. Journalism majors are not eligible for a minor in journalism studies.

**Required Courses**

Code	Title	Hours
<b>Foundation</b>		
JRNL 1150	Understanding Today's News	4
JRNL 2350	The History of Journalism: How the News Became the News	4
<b>Law</b>		
JRNL 3550	The First Amendment and the Media	4
<b>Elective</b>		
Take one JRNL course.		4

**GPA Requirement**

2.000 GPA required in the minor

**Photojournalism, Minor**

As our society continues to move toward a world of technology, the power of photos become that much more important. This minor will engage students on how to visually tell a compelling story. It will give students the skill sets needed to succeed in that endeavor.

**Minor Requirements**

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

*Note:* A student pursuing the minor in Photojournalism must complete a minimum of three (3) courses exclusive to this minor beyond the courses required for the student's declared major(s), minor(s), or PlusOne.

**Required Courses**

Code	Title	Hours
<b>Photography Foundation</b>		
Complete one of the following:		4
ARTE 2500	Art and Design Abroad: Studio	
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2350	Photo Basics for Nonmajors	

**Photography Requirement**

ARTD 3460	Photography: Concept + Process	4
<b>Integrative</b>		
JRNL 5310	Photojournalism	4
<b>Electives</b>		
Complete one of the following:		4
JRNL 2301	Visual Storytelling in Journalism	
JRNL 5314	Video News Reporting and Producing	

**GPA Requirement**

2.000 GPA required in the minor

**Sports, Media, and Communication, Minor**

The sports, media, and communication minor appeals to students preparing for careers as sports journalists or advertising/public relations professionals specializing in a sports-related area. The minor includes courses examining the prominent role of sports in society with a special emphasis on gender, race, and public policy. When combined with Northeastern's signature co-op program, the result is an innovative minor that blends theory with practice and prepares students for a broad range of professional opportunities.

**Program Requirements**

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

**Foundational Course**

Code	Title	Hours
COMM 2110	Sports, Media, and Communication	4

**Electives**

Code	Title	Hours
<b>Sports Elective</b>		
Complete one of the following:		4
COMM 2700	Sports Promotion in the 21st Century	
JRNL 3455	Sports Writing	
<b>Intermediate Elective</b>		
Complete one of the following:		4
ANTH 2365	Sport, Culture, and Society	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2350	Producing for the Entertainment Industry	
COMM 2655	Television Studio Production	
COMM 2800	Sport and Spectacle	
COMM 3451	Advertising Practices	
ECON 3481	Economics of Sports	
<b>Advanced Elective</b>		
Complete one of the following:		4
COMM 4631	Crisis Communication and Image Management	
COMM 4994	Internship in Communication	

JRNL 3945	Internship
JRNL 4650	Ethics and Issues in Journalism
JRNL 5310	Photojournalism
JRNL 5314	Video News Reporting and Producing

## GPA Requirement

2.000 GPA required in the minor

## Music

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

**Daniel Strong Godfrey, PhD**  
Professor and Chair

351 Ryder Hall  
617.373.2440  
617.373.4129 (fax)

The Department of Music offers its music majors, music minors, and combined majors a cross-disciplinary approach to the study and practice of music, underscored by real-world experiential learning and cutting-edge technology. The music faculty are dedicated to three continuously interacting and integrated dimensions: the creation of music; its production and promotion; and the study of its history, meaning, and impact on cultures around the globe—past, present, and future.

There are three concentrations in music: the Bachelor of Arts in Music, the Bachelor of Science in Music with Concentration in Music Technology, and the Bachelor of Science in Music with Concentration in Music Industry. Students in all three concentrations begin with a core of shared offerings, including a uniquely probing, cross-cultural, and interdisciplinary introduction to music, Music in Everyday Life (MUSC 1001), together with shared requirements in introductory theory and musicianship. With a common perspective offered by these courses, students then branch out to focus on their individual disciplines but also to interact and bring unique aspects of their disciplines together in a collaborative learning environment with other students.

Our signature program is the Bachelor of Arts in Music, designed to offer a variety of flexible advising paths that allow a focus on history, theory, ethnomusicology, performance, composition, humanics, or other directions tailored to the students' individual interests.

The Bachelor of Science in Music with Concentration in Music Technology focuses on the creative application of digital sound technologies to a broad range of artistic, social, and industrial purposes, including experimental composition, film, video, theatre, game design, mobile applications, sound design for urban environments, and beyond, with a new emphasis on digital signal processing, computation for sound, artificial intelligence, and auditory cognitive neuroscience. A focus is maintained throughout on imaginative exploration, collaboration across disciplines, and real-world experience.

The Bachelor of Science in Music with Concentration in Music Industry, the first such undergraduate program offered in Boston, is designed for students with an interest in fields such as artist management; the music products industry; the recording industry; arts administration; contracting and legal issues; financial and economics aspects of the music industry; and broadcast, mobile, and online media technologies.

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, World Music Ensemble, and Chamber Music Ensembles, along with individual student recitals and performances by an array of student-run music groups.

In addition to co-op, Dialogues of Civilization, and a range of other opportunities for experiential learning and study 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.

In addition to the three primary majors outlined above, there are six combined majors offered, integrating music disciplines with others both in and beyond the College of Arts, Media and Design. Students also 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.

## Programs

### Bachelor of Arts (BA)

- Music (p. 210)

### Bachelor of Science (BS)

- Music with Concentration in Music Technology (p. 215)
- Music with Concentration in Music Industry (p. 212)
- Computer Science and Music with Concentration in Music Technology (p. 218)
- Electrical Engineering and Music with Concentration in Music Technology, BSEE (p. 220)
- Game Design and Music with Concentration in Music Technology (p. 112)
- Music and Communication Studies with Concentration in Music Industry (p. 181)
- Physics and Music with Concentration in Music Technology (p. 226)
- Psychology and Music (p. 228)



## Minor

- Music (p. 231)
- Ethnomusicology (p. 230)
- Music Composition (p. 231)
- Music Industry (p. 232)
- Music Performance (p. 232)
- Music Recording (p. 233)
- Music Technology (p. 233)
- Musical Theatre (p. 234) (offered by the Department of Theatre)
- Performing Arts Administration (p. 234) (offered by the Department of Theatre)
- Songwriting (p. 235)

## Music, BA

The Bachelor of Arts in Music at Northeastern engages students in the study of how music works and the many contexts in which it is created and received.

Students encounter a wide range of musical repertoires, theoretical approaches, and research strategies. While many students opt to major in music alone, many others enroll as part of a double major. This is especially true of young scholars who are aiming for careers in engineering, sciences, business, and fields in the humanities and social sciences who still want to pursue their interests in music. Students in the BA concentration take a variety of classes in history, theory, and ethnomusicology, and they may be active performers, participating in our many ensembles and taking private lessons. Students also participate in a wide array of co-ops and are encouraged to explore opportunities that conform to their interests.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

- NUpath requirements Creative Expression/Innovation (EI) and Interpreting Culture (IC) are met through the major course requirements.
- NUpath requirements Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.
- NUpath requirements Natural and Designed World (ND) must be met through general electives.

## Introduction to College

Code	Title	Hours
MUSC 1000	Music at Northeastern	1

## Music Theory and Musicianship

Code	Title	Hours
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### Music Theory Placement

All students must take a music theory placement exam. Students who do not place into MUSC 1201 must first take the following course:

MUSC 1119	Fundamentals of Western Music Theory
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### Required Music Theory

A grade of C or higher is required in each course:

MUSC 1201	Music Theory 1	4
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Choose two courses from the following list: 8

MUSC 1119	Fundamentals of Western Music Theory
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MUSC 1202	Music Theory 2
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MUSC 2111	Algebra and Geometry of Music
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MUSC 2208	Jazz Improvisation
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MUSC 2350	Acoustics and Psychoacoustics of Music
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MUSC 3541	Music Analysis Seminar
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MUSI 1204	Analyzing Popular Genres
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## Music in Context

Choose one from each category below. From the categories 'Western Tradition,' 'Ethnomusicology,' and 'Contemporary,' at least two must be at the 2000-level or higher. Courses may not double-count across the five areas. Many, but not all, Music in Context courses at the 2000-level or higher fulfill the Writing Intensive in the discipline requirement. Please check Writing Intensive status of courses as needed.

Code	Title	Hours
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### Introductory Class

MUSC 1001	Music in Everyday Life	4
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### Western Tradition

Complete one of the following: 4

MUSC 1106	Women in Music
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MUSC 1116	Beethoven
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MUSC 1136	What's Playing at Symphony?
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MUSC 1144	Music and Technology: Stone Age to Digital Age
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MUSC 2107	Introduction to Opera
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MUSC 2312	Historical Traditions: Classical
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MUSC 2320	40,000 Years of Music Technology
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MUSC 2340	Divas, DJs, and Double Standards
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MUSC 3352	Sounding Human
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MUSC 3470	War and Music
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### Ethnomusicology

Complete one of the following: 4

MUSC 1112	Jazz
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MUSC 1131	Music of Latin America and the Caribbean
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MUSC 2101	Black Popular Music
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MUSC 2130	Music of Asia
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MUSC 2330	Musical Communities of Boston
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MUSC 3353	Music and the Racial Imagination
MUSI 3351	Music and Social Justice
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries

*Contemporary*

Complete one of the following: 4

MUSC 1106	Women in Music
MUSC 1112	Jazz
MUSC 1113	Film Music
MUSC 1141	Wired for Sound
MUSC 2101	Black Popular Music
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2310	Popular Music Since 1945
MUSC 2317	Punk Rock
MUSC 2320	40,000 Years of Music Technology
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2351	Music, Sound, and the Screen
MUSC 3352	Sounding Human
MUSC 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 choose four 1-semester-hour ensembles and/or lessons from the list below: 4

MUST 1220	Introduction to Music Technology
MUST 1301	Introduction to Composition
MUST 2320	Sound Design
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting

*Ensembles and Lessons*

MUSC 1901	Music Lessons 1
MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra
MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble
MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 1916	Contemporary Music Ensemble
MUSC 1917	Jazz Choir and Combo
MUSC 1918	World Music Ensemble
MUSC 1919	Fusion Ensemble
MUSC 1920	Pep Band

**Capstone**

Code	Title	Hours
Complete one of the following: 4		
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	
MUST 4611	Music Technology Capstone/Senior Recital	

**Music Electives**

Code	Title	Hours
Complete three additional courses in music (MUSC, MUSI, or MUST). At least two must be at the 2000-level or higher. 12		

**Major Credit Requirement**

Complete 49 semester hours in the major.

**Major GPA Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, No Co-op**

Year 1			
Fall	Hours	Spring	Hours
MUSC 1001	4	Music theory course	4
MUSC 1201	4	Music in context course	4
ENGW 1111	4	Music elective	4
MUSC 1000	1	Elective	4
Elective	4		
			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
Year 3			
Fall	Hours	Spring	Hours
Music in context course	4	Elective	4
Music theory course	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
			16

Year 4		
Fall	Hours Spring	Hours
Elective	4 Capstone course	4
Elective	4 Elective	4
Elective	4 Elective	4
Elective	4 Elective	4
		16

Total Hours: 129

### Sample Four Years, Two Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MUSC 1001	4	Music in context elective (1)	4	Elective	4
ENGW 1111	4	MUSC 1201	4	Elective	4
MUSC 1119	4	Language (2)	4		
MUSC 1000	1	Elective	4		
Language 1		4			
		17	16	8	0

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
Music in context course (2)	4	Co-op 1	4	Co-op 1	4
Music elective (1)	4		4	Elective (on-line)	4
Music theory course	4				4
Language Elective (3)		4	or Dialogue		
EEAM 2000	1				
		17	0	4	8

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Music in context course (3)	4	Co-op 2	4	Co-op 2	4
Music elective (2)	4		4	Elective (on-line)	4
Elective	4	or Dialogue			
ENGW 3314	4				
		16	0	4	8

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Music in context course (4)	4	Music Capstone	4	Vacation	4
Music elective (3)	4	Elective	4		
Music theory course	4	Elective	4		
Elective	4	Elective	4		
		16	16	0	0

Year 5		
Fall	Hours Spring	Hours
	0	0

Total Hours: 130

## Music with Concentration in Music Industry, BS

The Bachelor of Science in Music with Concentration in Music Industry, the first such undergraduate program offered in Boston, is designed for students with an interest in all aspects of the music industries, including songwriting, recording, production, technology, products, label operations, promotion, marketing, management, finance, economics, legal issues, licensing, and intellectual property. Our program encourages learners to become entrepreneurial thought leaders and ethical change agents in the music industries.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Analyzing and Using Data (AD) are met through the major course requirements.

NUpath requirements Difference and Diversity (DD) and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Music Industry Requirements

Code	Title	Hours
<b>Music Core</b>		
MUSC 1000	Music at Northeastern	1
MUSC 1001	Music in Everyday Life	4
<b>Music Theory Placement</b>		
All students must take a theory placement exam. Students who do not place into MUSC 1201 must first take the following:		
MUSC 1119	Fundamentals of Western Music Theory	4
<b>Music Theory Requirement</b>		
MUSC 1201	Music Theory 1	4
MUSI 1204	Analyzing Popular Genres	4
<b>Music in Context</b>		

Choose one from each of these categories: Western Tradition, Ethnomusicology, Contemporary, and Creative. Of the courses from Western Tradition, Ethnomusicology, and Contemporary, at least two must be at the 2000-level or higher. Courses may not double count across these areas. Many, but not all, Music in Context courses at the 2000-level or higher fulfill the Writing Intensive in the Discipline requirement. Please check Writing Intensive status of courses as needed. Students may use MUSC 2210, MUSC 2211, MUSI 2331, MUSI 3341, or MUST 1220 to fulfill both Creating and Producing and Music In Context Creative; but will also need to take one additional Music Industry elective.

**Western Tradition (complete one):** 4

MUSC 1106	Women in Music
MUSC 1116	Beethoven
MUSC 1136	What's Playing at Symphony?
MUSC 1144	Music and Technology: Stone Age to Digital Age
MUSC 2107	Introduction to Opera
MUSC 2312	Historical Traditions: Classical
MUSC 2320	40,000 Years of Music Technology
MUSC 2340	Divas, DJs, and Double Standards
MUSC 3352	Sounding Human
MUSC 3470	War and Music

**Ethnomusicology (complete one):** 4

MUSC 1112	Jazz
MUSC 1131	Music of Latin America and the Caribbean
MUSC 2101	Black Popular Music
MUSC 2130	Music of Asia
MUSC 2330	Musical Communities of Boston
MUSC 3353	Music and the Racial Imagination
MUSI 3351	Music and Social Justice
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries

**Contemporary (complete one):** 4

MUSC 1106	Women in Music
MUSC 1112	Jazz
MUSC 1113	Film Music
MUSC 1141	Wired for Sound
MUSC 2101	Black Popular Music
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2310	Popular Music Since 1945
MUSC 2317	Punk Rock
MUSC 2340	Divas, DJs, and Double Standards
MUSC 2351	Music, Sound, and the Screen
MUSC 3352	Sounding Human
MUSC 3560	Topics in Music since 1900
MUSI 3401	Hip Hop in the Music Industry

**Creative (complete one):** 4

MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting

MUST 1220	Introduction to Music Technology
MUST 1301	Introduction to Composition
MUST 2320	Sound Design
<i>Music Ensemble: May substitute four 1-semester-hour applied courses (ensembles and/or lessons) for one 4-semester-hour creative course.</i>	
MUSC 1901	Music Lessons 1
MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra
MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble
MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 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	4
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**Music Industry Electives**

Complete seven music industry electives, taking a minimum of one course in each of the following four categories and at least three courses from a single category. 28

**Creating and Producing**

Note: MUSI 1230 is not a prerequisite for the following courses:

MUSC 2210	Introduction to Songwriting
MUSC 2211	Advanced Songwriting
MUSI 2232	Music Recording 1
MUSI 2331	Music Recording 2
MUSI 3341	Music Recording 3—Mixing and Mastering
MUST 1220	Introduction to Music Technology

**Legal Aspects**

Note: MUSI 1230 is a prerequisite for the following courses:

MUSI 2231	Music Licensing for Media
MUSI 2235	Copyright in the Creative Industries
MUSI 3333	The Record Industry
MUSI 2341	Music Supervision 1

**Music Business and Management**

Note: MUSI 1230 is a prerequisite for the following courses:

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**

Note: MUSI 1230 is a prerequisite for the following courses:

MUSI 3401	Hip Hop in the Music Industry
MUSI 4601	Seminar in Music Industry
MUSI 5900	Ethnography in Creative Industries

### Business Course Requirements

Code	Title	Hours
<b>Economics</b>		
ECON 1116	Principles of Microeconomics	4
<b>Accounting</b>		
ACCT 1209	Financial Accounting and Reporting	4
<b>Business Elective</b>		
Complete one business course in the following subject areas:		4
ACCT, BUSN, ENTR, FINA, HRMG, INTB, MGMT, ORGB, MGSC, MISM, MKTG, SCHM, or STRT		

### Capstone for Music Industry

Code	Title	Hours
Complete one of the following:		
MUSI 4530	Music Entrepreneurship	4
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	

### Music Industry Major Credit and Grade Requirement

Complete 77 semester hours in the major.

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1000	1	ACCT 1209	4	Music in context course	4	Vacation	
MUSC 1001	4	ECON 1116	4	Elective	4		
MUSC 1119	4	MUSC 1201	4				
MUSI 1230	4	Music industry elective	4				
ENGW 1111	4						
17		16		8		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSI 1204	4	Co-op		Co-op		Elective	4
Music industry elective	4	Elective (online)	4			Elective	4
Music industry elective	4					or Dialogue of Civilizations	
Elective	4						

EEAM 2000	1						
17		4		0		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Business elective	4	Co-op		Co-op		Elective	4
Music industry elective	4	Elective (online)	4			Elective	4
Music in context course	4					or Dialogue of Civilizations	
Music industry elective	4						
16		4		0		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music industry elective	4	Music industry elective	4				
Music in context course	4	Music industry capstone	4				
Elective	4	Elective	4				
ENGW 3314	4	Music in context course	4				
16		16					

Total Hours: 130

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1001	4	MUSC 1201	4	Elective	4	Vacation	0
MUSC 1119	4	ACCT 1209	4	Elective	4		
MUSI 1230	4	ECON 1116	4				
ENGW 1111	4	Music industry elective	4				
MUSC 1000	1						
17		16		8		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSI 1204	4	Music industry elective	4	Vacation	0	Co-op 1	0
Music industry elective	4	Business elective	4				
Music in context course	4	Music in context course	4				
Elective	4	Elective	4				
		EEAM 2000	1				
16		17		0		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op 1	0	Music in context course	4	Elective	4	Co-op 2	0
		Music industry elective	4	Elective	4		
		Elective	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op 2	0	Music industry elective	4	Vacation	4	Co-op 3	0
		Music in context course	4				
		Music industry elective	4				
	0		16		0		0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op 3	0	Music industry capstone	4				
		Music industry elective	4				
		Elective	4				
	0		16				

Total Hours: 130

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1001	4	MUSC 1201	4	Elective	4	Vacation	0
MUSC 1119	4	ACCT 1209	4	Elective	4		
MUSI 1230	4	ECON 1116	4				
ENGW 1111	4	Music industry elective	4				
MUSC 1000	1						
	17		16		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSI 1204	4	Co-op 1	0	Co-op 1	0	Elective	4
EEAM 2000	1					Elective	4
Music industry elective	4						

Music in context course	4				
Elective	4				
	17		0		0
					8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music industry elective	4	Co-op 2	0	Co-op 2	0	Vacation	0
Business elective	4						
Music in context course	4						
Elective	4						
	16		0		0		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music industry elective	4	Co-op 3	0	Co-op 3	0	Vacation	0
Music in context course	4						
Music industry elective	4						
Elective	4						
	16		0		0		0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music in context course	4	Music industry capstone	4				
Music industry elective	4	Music industry elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
	16		16				

Total Hours: 130

### Music with Concentration in Music Technology, BS

The Bachelor of Science in Music with Concentration in Music Technology focuses on the creative application of digital 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

- NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Analyzing and Using Data (AD) are met through the major course requirements.
- NUpath requirements Difference and Diversity (DD) and Formal and Quantitative Reasoning (FQ) may be met through electives in the major.
- NUpath requirements Natural and Designed World (ND), Societies and Institutions (SI), and Ethical Reasoning (ER) must be met through general electives.

## General Music Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MUSC 1000	Music at Northeastern	1
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following:		8
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
MUSC 3541	Music Analysis Seminar	
MUST 2320	Sound Design	
<b>Music in Context</b>		
A grade of C or higher is required. Choose one from each of these categories: 'Western Tradition,' 'Ethnomusicology,' 'Contemporary,' and "Creative." Of the courses from 'Western Tradition,' 'Ethnomusicology,' 'Contemporary,' at least two must be at the 2000-level or higher. Courses may not double count across these areas. Many, but not all, Music in Context courses at the 2000-level or higher fulfill the Writing Intensive in the discipline requirement. Please check Writing Intensive status of courses as needed.		
<i>Introductory Class</i>		
MUSC 1001	Music in Everyday Life	4
<i>Western Tradition</i>		
Complete one of the following:		4
MUSC 1116	Beethoven	
MUSC 1144	Music and Technology: Stone Age to Digital Age	
MUSC 2107	Introduction to Opera	
MUSC 2312	Historical Traditions: Classical	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 3352	Sounding Human	
MUSC 3470	War and Music	
<i>Ethnomusicology</i>		
Complete one of the following:		4

MUSC 1112	Jazz	
MUSC 1131	Music of Latin America and the Caribbean	
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2330	Musical Communities of Boston	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	
<i>Contemporary</i>		
Complete one of the following:		4
MUSC 1112	Jazz	
MUSC 1113	Film Music	
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
<i>Music Industry</i>		
Complete one of the following, as long as prerequisites have been met:		4
MUSI 1230	Introduction to Music Industry	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2331	Music Recording 2	
<b>Music Technology Requirements</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Technology Electives</b>		
Complete three of the following:		12
MUSC 4510	Music and the Brain Research	
MUST 4610	Composition for Electronic Instruments	
MUST 3540	Special Topics in Music Technology	
MUST 4520	Interactive Music Programming	
<b>Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4
<b>Supporting Courses</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>College Elective</b>		
Complete one of the following:		4
ARTD 2100	Narrative Basics	
ARTF 2220	Movement and Time	
ARTF 2223	Experience and Interaction	
ARTD 3480	Video: Sound and Image	
GAME 1110	Games and Society	

GAME 2500	Foundations of Game Design
MSCR 1220	Media, Culture, and Society
MSCR 1100	Film 101
MSCR 3435	Media Industries
MSCR 3600	Film Theory
THTR 1131	Technical Theatre 1
THTR 1270	Introduction to Theatrical Design
THTR 2370	Lighting Design

### Music Technology Major Credit and Grade Requirement

Complete 69 semester hours in the major.

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

129 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MUSC 1001	4	MUSC 2350	4	CAMD Elective	4
MUST 1220	4	MUSC 1201	4	Elective	4
MUSC 1119	4	Music in Context course: western	4		
ENGW 1111	4	Elective	4		
MUSC 1000	1				
		17	16		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUST 2431	4	Co-op		Co-op		2 Electives	8
MUSC 1202	4	Elective (on-line)	4	Elective (on-line)	4	or Dialogue	
Music theory/ composition elective	4						
Music in Context course: ethnomusicol	4						
EEAM 2000	1						
		17	4		4		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music Industry Elective	4	Co-op		Co-op		2 Electives	8
Music technology elective	4					or Dialogue	

Music theory/ composition Elective	4					
Music industry elective	4					
		16	0		0	8

Year 4			
Fall	Hours	Spring	Hours
Music technology elective	4	MUST 4611	4
Music technology elective	4	Elective	4
Elective	4	Elective	4
ENGW 3314	4	Elective	4
		16	16

Total Hours: 130

#### Sample Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1000	1	MUSC 1202	4	Vacation		Vacation	0
MUSC 1201	4	MUSC 2350	4				
MUST 1220	4	Music in context: Western	4				
MUSC 1001	4	Elective	4				
ENGW 1111	4						
		17	16		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUST 2431	4	Elective	4	Vacation		Vacation	
MUSC 2350	4	Music theory/ composition elective	4				
Music theory/ composition elective	4	Elective	4				
Elective	4	Music in context: contemporary	4				
		16	16		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Music technology elective	4	CAMD elective	4	Vacation		Vacation	
Music in context: ethnomusicol	4	Elective	4				
Music industry elective	4	Elective	4				

Music technology elective	4	Elective	4		
	16		16	0	0

**Year 4**

Fall	Hours	Spring	Hours
Music technology restricted elective	4	MUST 4611	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

**Computer Science and Music with Concentration in Music Technology, BS**

The computer science and music combined major with concentration in music technology focuses on the creative application of 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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4

CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction (Integrative)	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective**

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010	8
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

**Music Courses**

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following:		8
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition (Music Perception and Cognition)	
MUSC 3541	Music Analysis Seminar	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<b>Contemporary</b>		
Complete one of the following:		4
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Industry</b>		
Complete one of the following:		4
MUSI 1230	Introduction to Music Industry	
MUSI 2331	Music Recording 2	
MUSI 3335	Copyright Law for Musicians	
<b>Music Technology Electives</b>		
Complete two of the following:		8

MUSC 4510	Music and the Brain Research
MUST 3540	Special Topics in Music Technology
MUST 4520	Interactive Music Programming
MUST 4610	Composition for Electronic Instruments

**Music Technology Capstone**

MUST 4611	Music Technology Capstone/Senior Recital	4
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**Foundations of Psychology**

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4

**Computing and Social Issues**

Code	Title	Hours
Complete one of the following:		4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300	Knowledge in a Digital World
or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Computer Science English Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 20 credits of general electives.		20

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Music Technology Major Grade Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

133 total semester hours required

**Plan of Study**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	MUST 1220 (*)	4	CS 3200	4		
CS 2500 and CS 2501	5	MUSC 1202 (*)	4				
MUSC 1201 (*)	4	MUSC 2350	4				
ENGW 1111	4						
19		17		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						
Elective	4						
MUST 2431	4						
17		0		0		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 3541, 2111, or 3300	4	Co-op		0 Co-op		0 Vacation	0
Contemporary music requirement*	4						
Music technology elective							
Khoury elective	4						
12		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			
Khoury elective	4			
	17	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
CS 4500	4	MUST 4611 (*)	4
MUSC 3541, 2111, or 3300	4	Elective	4
Computing and social issues	4	Music industry elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

\*Indicates course must be taken in the term listed.

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	MUST 1220 (*)	4	CS 3200	4		
CS 2500 and CS 2501	5	MUSC 1202 (*)	4				
MUSC 1201 (*)	4	MUSC 2350	4				
ENGW 1111	4						
	19		17		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						
Khoury elective	4						
MUST 2431	4						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 2111, MUSC 3541 or MUSC 3300	4	Co-op		Co-op		PSYC 1101	4
MUSC 2111, MUSC 3541 or MUSC 3300						Elective	4
Contemporary music requirement*	4						

Music technology elective*	4			
	12	0	0	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
IS 4300	4	MUST 4611 (*)	4	Elective	4
CS 4500	4	Elective	4	Elective	4
THTR 1170	1	Computing and social issues	4		
Music technology elective*	4	Music industry elective	4		
Khoury elective	4				
	17		16		8

Total Hours: 130

\*Indicates course must be taken in the term listed.

**Electrical Engineering and Music with concentration in Music Technology, BSEE**

This intercollege combined major is designed for students who would like to explore their interest in music technology while earning the benefit of a Bachelor of Science degree in electrical engineering. The music industry relies heavily on electronic technology in the production (e.g., 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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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 Requirements**

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5

EECE 2160 Embedded Design: Enabling Robotics 4

### Electrical Engineering Fundamentals

EECE 2412 Fundamentals of Electronics 5  
and EECE 2413 and Lab for EECE 2412

EECE 2520 Fundamentals of Linear Systems 4

EECE 2530 Fundamentals of Electromagnetics 5  
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: 4-5

EECE 2322 Fundamentals of Digital Design and  
and EECE 2323 Computer Organization  
and Lab for EECE 2322

EECE 2540 Fundamentals of Networks

EECE 2560 Fundamentals of Engineering  
Algorithms

### Electrical Engineering Capstone Courses

EECE 4790 Electrical and Computer Engineering 4  
Capstone 1

EECE 4792 Electrical and Computer Engineering 4  
Capstone 2

### Technical Electives

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.

Complete two of the following. If EECE 5697 is taken, students are required to complete a music elective. 8

EECE 2322 Fundamentals of Digital Design and  
and EECE 2323 Computer Organization  
and Lab for EECE 2322

EECE 2540 Fundamentals of Networks

EECE 2750 Enabling Engineering

EECE 3324 Computer Architecture and  
Organization

EECE 3410 Electronic Design

EECE 4512 Healthcare Technologies: Sensors,  
Systems, and Analysis

EECE 4991 Research

EECE 4992 Directed Study

EECE 4993 Independent Study

EECE 5155 Wireless Sensor Networks and the  
Internet of Things

EECE 5698 Special Topics in Electrical and  
Computer Engineering

ENGR 5670 Sustainable Energy: Materials,  
Conversion, Storage, and Usage

GE 4608 Introduction to Nanotechnology in  
Engineering

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

EECE 3468 Noise and Stochastic Processes

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501 Cornerstone of Engineering 1

3 semester hours from the following course count toward the engineering requirement: 3

GE 1502 Cornerstone of Engineering 2

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4

MATH 1341	Calculus 1 for Science and Engineering	4
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MATH 1342	Calculus 2 for Science and Engineering	4
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MATH 2321	Calculus 3 for Science and Engineering	4
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MATH 2341	Differential Equations and Linear Algebra for Engineering	4
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PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
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PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
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2 semester hours from the following course count toward this requirement: 2

EECE 3468 Noise and Stochastic Processes

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

### Professional Development

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1

ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2

### Music Requirements

Code	Title	Hours
<b>Music Theory</b>		

Complete one of the following pairs: 8

MUSC 1119 and MUSC 1201	Fundamentals of Western Music Theory and Music Theory 1	
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MUSC 1201 and MUSC 1202	Music Theory 1 and Music Theory 2	
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MUSC 1202 Music Theory 2  
and MUSC 3541 and Music Analysis Seminar

Required Context Course		
MUSC 1001	Music in Everyday Life	4

Music in Context		
Complete one of the following:		

MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2130	Music of Asia	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2312	Historical Traditions: Classical	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3470	War and Music	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3351	Music and Social Justice	
MUSI 5900	Ethnography in Creative Industries	

Acoustics or Music Elective		
Complete one of the following. If EECE 5697 is taken, students are required to complete a music elective.		

MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUSC 2000 to MUSC 5999		

Music Technology		
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4

Music Technology Electives		
Complete two of the following. Other appropriate MUST courses will be considered by petition to fulfill this category.		
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 4520	Interactive Music Programming	
MUST 4610	Composition for Electronic Instruments	

### Writing Requirements

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 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 4 SH of academic, nonremedial, nonrepetitive courses.		

### Major GPA Requirement

Minimum 2.000 GPA required in EECE courses

### Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

136 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	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation		Vacation		
CHEM 1153	0	MATH 1342 (FQ)	4					
ENGW 1111 (WF)	4	MUST 1220 (AD)	4					
GE 1000	1	PHYS 1151 (ND)	3					
GE 1501	4	PHYS 1152 (AD)	1					
MATH 1341 (FQ)	4	PHYS 1153	1					
		17		17		0		0

Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
EECE 2150 (AD)	5	Co-op		Co-op		Vacation		
ENCP 2000	1							
MATH 2341	4							
MUST 2431 (FQ, AD)	4							
PHYS 1155 (ND)	3							
PHYS 1156 (AD)	1							
PHYS 1157	1							
		19		0		0		0

Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
EECE 2160	4	Co-op		Co-op		ENGW 3302 or 3315	4	
MATH 2321 (FQ)	4					General Elective	4	
MUSC 1001 (EI, IC)	4							
EE Fundamental:	5							
		17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
ENCP 3000	1	Co-op		Co-op		EECE 4790 (EI, CE, WI)	4		
CE Fundamentals	4					ECE Tech Elective	4		
EE Fundamentals	4								
EE Fundamentals	5								
Music Tech Elective	4								
		18			0			0	8

**Year 5**

Fall	Hours	Spring	Hours
EECE 3468	4	ECE Tech Elective	4
EECE 4792 (EI, CE, WI)	4	Music in Context	4
Music Tech Elective	4	Music Elective	4
Music Theory Course	4	Music Theory Course	4
		16	16

Total Hours: 136

**Game Design and Music with concentration in Music Technology, BS**

The Game Design and Music combined major with a concentration in Music Technology prepares students to manage all aspects of music and sound design integral to the creative process in Game Design. Students focus on the digital sound technologies, audiovisual integration techniques and collaborative skills, grounded in real-world experience, that are necessary to apply one's musical imagination effectively in a game design environment. Also emphasized are the aesthetic, expressive, psychological and social perspectives essential to meaningful engagement across a broad range of applications in the game industry.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), and Analyzing/Using Data (AD), Interpreting Culture (IC), Natural/Designed World (ND), Difference/Diversity (DD), Writing Intensive (WI), and Capstone

Experience(CE) are met through the major course requirements. All other NUpath requirements must be met through electives.

**Game Design Courses**

Code	Title	Hours
ARTF 1000	Art and Design at Northeastern	1
<b>Game Design Required</b>		
GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development and Production	4

**Game Design Electives**

Complete one of the following:

GAME 1850	Experimental Game Design	4
or GAME 3300	Game Interface Design	

**Art + Design Electives**

Complete three courses from the following: 12

Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.

**Music Requirements**

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following: 8		
MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
MUSC 3541	Music Analysis Seminar	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<b>Contemporary</b>		
Complete one from the following: 4		
MUSC 2101	Black Popular Music	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
<b>Music Technology Requirements</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Technology Electives</b>		
Complete two of the following: 8		
MUSC 4510	Music and the Brain Research	
MUST 2320	Sound Design	
MUST 4610	Composition for Electronic Instruments	
MUST 3540	Special Topics in Music Technology	
MUST 4520	Interactive Music Programming	

## Integrative Requirement

Code	Title	Hours
MUST 1220	Introduction to Music Technology	
<b>Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4
GAME 4700	Game Design Capstone	4

## Combined-Major Credit Requirement

Complete 90 semester hours in the major.

## Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

128 total semester hours required

### 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

## Music Industry Requirements

Code	Title	Hours
<b>Introduction to College</b>		
MUSC 1000	Music at Northeastern	1
<b>Music Core</b>		
MUSC 1001	Music in Everyday Life	4
<b>Music Theory Placement</b>		
All students must take a theory placement exam. Students who do not place into MUSC 1201 must first take the following:		
MUSC 1119	Fundamentals of Western Music Theory	4
<b>Music Theory Requirement</b>		
MUSC 1201	Music Theory 1	4
<b>Introductory Music Industry</b>		
MUSI 1230	Introduction to Music Industry	4
<b>Music in Context</b>		
Choose one course from western tradition, ethnomusicology, or contemporary categories.		
<i>Western Tradition</i>		
MUSC 2107	Introduction to Opera	
MUSC 2312	Historical Traditions: Classical	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 3352	Sounding Human	
MUSC 3470	War and Music	
<i>Ethnomusicology</i>		
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2330	Musical Communities of Boston	
MUSC 3353	Music and the Racial Imagination	
MUSI 3351	Music and Social Justice	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	
<i>Contemporary</i>		
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	

MUSI 3401	Hip Hop in the Music Industry	
<b>Music Industry Electives</b>		
Complete three of the following:		12
MUSC 2210	Introduction to Songwriting	
MUSC 2211	Advanced Songwriting	
MUSI 1204	Analyzing Popular Genres	
MUSI 2231	Music Licensing for Media	
MUSI 2232	Music Recording 1	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2341	Music Supervision 1	
MUSI 2540	Special Topics in Music Industry	
MUSI 3332	Artist Management	
MUSI 3333	The Record Industry	
MUSI 3334	Music Products Industry	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 4530	Music Entrepreneurship	
MUSI 4601	Seminar in Music Industry	
MUSI 5900	Ethnography in Creative Industries	
MUST 1220	Introduction to Music Technology	

<b>Business Course</b>		
ACCT 1209	Financial Accounting and Reporting	4

**Communication Studies Requirements**

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1231	Principles of Organizational Communication	
COMM 1225	Communication Theory	
COMM 1255	Communication in a Digital Age	

<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	

COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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

<b>Communication Studies Electives</b>	
Complete three COMM courses:	12

**Integrative Requirement**

Code	Title	Hours
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.		4-8

<b>Music Option</b>		
Complete one of the following:		
MUSI 4601	Seminar in Music Industry	
MUSI 4530	Music Entrepreneurship	
MUSI 5900	Ethnography in Creative Industries	

<b>Communication Studies Option</b>		
Complete two of the following. One communication studies course is required:		
COMM 4608	Strategic Communication Capstone	
or COMM 4625	Online Communities	
MUSC 2000 to MUSC 5999		
MUSI 2000 to MUSI 5999		
MUST 2000 to MUST 5999		

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Music Industry Major Grade Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 1000 or COMM 1000	1	ENGW 1111	4	Elective	4	Elective	4
MUSC 1001	4	MUSC 1201	4	Elective	4	Elective	4

MUSI 1230	4	Communication studies foundational course	4				
COMM 1101	4	Music in context elective	4				
COMM 1112 or 2301	4						
	17		16		8		8
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Communication studies cluster course	4	Communication studies elective	4	Elective	4	Co-op	
Elective	4	Elective	4	Elective	4		
Music industry elective	4	Music industry elective	4				
Elective	4	Elective	4				
		EEAM 2000	1				
	16		17		8		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		ENGW 3314 or 3315	4	Communication studies elective	4	Co-op	
		Communicati studies elective	4	Communicati studies writing-intensive	4		
		ACCT 1209	4				
		Elective	4				
	0		16		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op		Communication studies writing-intensive	4				
		Music industry elective	4				
		Integrative course	4				
		Capstone	4				
	0		16				

Total Hours: 130

## Physics and Music with Concentration in Music Technology, BS

The combined major in physics and music provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students with a solid background in composition for acoustic and electronic instruments and for combined and/or interactive live and digital sources.

The combined major allows students to learn how physical principles influence sound production and propagation.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
<i>Physics 2</i>		
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
PHYS 5318	Principles of Experimental Physics	4

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

### Music Requirements

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following:		
MUSC 3541	Music Analysis Seminar	4
MUSC 2111	Algebra and Geometry of Music	4
MUSC 3300	Music Perception and Cognition	4
<b>Music in Context</b>		

MUSC 1001	Music in Everyday Life	4
<i>Contemporary</i>		
Complete one course from the following:		4
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2317	Punk Rock	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	

<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4

<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 4610	Composition for Electronic Instruments	
MUST 4520	Interactive Music Programming	

<b>Music Technology Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4

### Physics/Music Integrative Requirements

Code	Title	Hours
<b>Integrative Course Requirements</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4

### Physics and Music Combined-Major Credit Requirement

Complete 98 semester hours in the major.

### Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

### Program Requirement

131 total semester hours required

### Plan of Study

#### Note on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, **depending on the year of entry for that student.**

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation		Vacation	
PHYS 1161	4	PHYS 1166	1				
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	MATH 1342	4				
MATH 1341	4	MUST 1220	4				
MUSC 1001	4	Elective	4				
ENGW 1111	4						
		18		17		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	PHYS 3602	4	Vacation		Vacation on ODD years. See offering schedule for even years	
MATH 2321	4	MATH 2341	4				
MUSC 1201	4	MUSC 1202	4				
Elective	4	MUSC 2350	4				
		16		16		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2371	3	Co-op		Co-op		PHYS 3600	4
PHYS 2372	1					PHYS 4305	4
MUST 2431	4						
Elective	4						
EESC 2000	1						
MUSC 3541, 2111, or 3300	4						
		17		0		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 3541, 2111, or 3300	4	Co-op		Co-op		Vacation	
MUST 3540	4						
PHYS 4115	4						
Music elective	4						
		16		0		0	

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3307	4	PHYS 5318	4				
MUST 4610	4	MUST 4611	4				
Elective	4						
Elective	4						
		16		8			

Total Hours: 132



**FOUR YEARS, ONE CO-OP IN SPRING/SUMMER 1****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation		Vacation	
PHYS 1161	4	PHYS 1166	1				
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	MATH 1342	4				
MATH 1341	4	MUST 1220	4				
MUSC 1001	4	Elective	4				
ENGW 1111	4						
	18		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	MATH 2341	4	Vacation		PHYS 3600	4
PHYS 2371	3	MUSC 1202	4			Elective in ODD years, PHYS 4305 in EVEN years	4
PHYS 2372 <sup>3</sup>	1	MUSC 2350	4				
MATH 2321	4	PHYS 3602	4				
MUSC 1201	4						
	16		16		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUST 2431	4	Co-op		Co-op		ENGW 3307	4
MUSC 3541, 2111, or 3300	4					PHYS 4305 (in EVEN years, Elective in ODD years.)	4
Music elective	4						
PHYS 4115	4						
EESC 2000	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
MUSC 3541, 2111, or 3300	4	PHYS 5318	4
MUST 3540	4	MUST 4611	4
MUST 4610	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 132

**Offerings schedule (subject to changes)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)

- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Psychology and Music, BS**

This combined major educates students in psychology and music and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, psycholinguistics, perception, and the biological basis of behavior. Music courses provide a foundation in music theory; creative music in context; contemporary/ethnomusicology; music perception and cognition; and the psychoacoustics of music. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining human behavior in the domain of music.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Psychology Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4
<b>Required Lab</b>		
Complete one of the following		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	

PSYC 4628 Laboratory in Developmental Psychology

**Required Seminar**

Complete one of the following 4

PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Psychology Electives**

Complete two PSYC courses not used to fulfill requirements above 8

**Music Theory Requirements**

Code	Title	Hours
<b>Required Courses</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4

**Music in Context**

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4

**Creative Category**

Complete one of the following 4-semester-hour courses or choose four 1-semester hour ensembles and/or lessons from the list 4

MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting
MUST 1220	Introduction to Music Technology
MUST 1301	Introduction to Composition
MUST 2320	Sound Design

*Ensembles and Lessons*

MUSC 1901	Music Lessons 1
MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra
MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble
MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 1916	Contemporary Music Ensemble
MUSC 1917	Jazz Choir and Combo

MUSC 1918 World Music Ensemble

MUSC 1919 Fusion Ensemble

MUSC 1920 Pep Band

**Contemporary or Ethnomusicology Category**

Complete one of the following 4

MUSC 2101	Black Popular Music
MUSC 2130	Music of Asia
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2310	Popular Music Since 1945
MUSC 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 3560	Topics in Music since 1900
MUSI 3351	Music and Social Justice
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries

*Note MUSC 2150 can be used to meet either the Creative or the Ethnomusicology/Contemporary requirement, but not both*

**Music Requirements**

Code	Title	Hours
MUSC 2350	Acoustics and Psychoacoustics of Music	4
or INAM 3200	Creative Cognition	
MUSC 3300	Music Perception and Cognition	4
<b>Capstone</b>		
MUSC 4510	Music and the Brain Research	4

**Music Electives**

Code	Title	Hours
Complete two courses from MUSC, MUSI, or MUST not used to fulfill the requirements above 8		

**Other Requirements Outside Major**

Code	Title	Hours
PSYC 1000	Psychology at Northeastern	1
or MUSC 1000	Music at Northeastern	
EESC 2000	Professional Development for Co-op	1
or EEAM 2000	Professional Development for Co-op	
COOP 3945	Co-op Work Experience	0
or EEAM 2945	College of Arts, Media and Design Co-op Experience	
ENGW 1111	First-Year Writing	4
Complete one of the following 4		
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1241	Calculus 1	

**Bridge/Integrative Courses**

Code	Title	Hours
Note: MUSC 3300 is already required above.		
MUSC 3300	Music Perception and Cognition	

**NUpath not fulfilled by major**

Code	Title	Hours
NUpath DD (Some Music-in-Context courses satisfy DD.)		4
NUpath ER (Some Music-in-Context courses satisfy ER.)		4
NUpath WD		4

**Open Electives**

Code	Title	Hours
Complete seven open electives		28

**Plan of Study****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC 2320	4	PSYC 3466	4	Open Elective	4
MUSC 1001	4	MUSC 1201	4	Music Elective	4	Open Elective	4
ENGW 1111	4	MATH 1213	4				
NUpath DD	4	NUpath ER	4				
MUSC 1000 or PSYC 1000	1						
	17		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3458	4	PSYC 3464	4	Open Elective	4	CO-OP	0
MUSC 1202	4	MUSC 2350 or INAM 3200	4	PSYC Elective	4		
Open Elective	4	Contemporary/Ethno Course	4				
MUSC 3300	4	Open Elective	4				
		EESC 2000 or EEAM 2000	1				
	16		17		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CO-OP	0	PSYC 3452	4	PSYC Lab	4	CO-OP	0
		Creative MUSC Course	4	PSYC Elective	4		
		MUSC 4510	4				
		Open Elective	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
CO-OP	0	PSYC Seminar	4
		Music Elective	4
		WD	4

Open Elective	4
	0
	16

Total Hours: 130

**Ethnomusicology, Minor**

The minor in ethnomusicology offers students an interdisciplinary approach to exploring the richness of music in its cultural context.

The foundation of the minor is a unique introductory course, Music in Everyday Life (MUSC 1001), which investigates many dimensions of musical experience and music's connections to society. Students can take in-depth electives that focus on the music of a region, the global circulation of popular music, or courses that investigate music's relationship to critical issues around gender, race, disability, technology, ethics, neoliberalism, postcolonialism, and social justice, to name a few intersections. The minor culminates in a seminar, Musical Communities of Boston (MUSC 2330), which invites students to conduct their own ethnographic projects in and around Boston. For this course, students have worked closely with homeless street performers in Boston's subway system, documented a weekly Grateful Dead night in the basement of an independent record store, and joined an all-female swing big band. Some of these projects have resulted in long-term social, academic, and musical collaborations.

Ethnomusicological studies would enrich many programs or degrees, including but not limited to African-American studies; sociology; anthropology; Asian studies; Middle Eastern studies; Jewish studies; world language studies; cultural studies; women, gender, and sexuality studies; Latin American studies; religion; urban studies; Art + Design; cinema studies; communication studies; international affairs; theatre; political science; or health sciences. Music majors may also add this minor.

**Minor Requirements**

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

**Required Courses**

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
MUSC 2330	Musical Communities of Boston	4

**Ethnomusicology Electives**

Code	Title	Hours
Complete two of the following:		
MUSC 1112	Jazz	4
MUSC 1131	Music of Latin America and the Caribbean	4
MUSC 2101	Black Popular Music	4
MUSC 2130	Music of Asia	4
MUSC 3353	Music and the Racial Imagination	4
MUSC 3470	War and Music	4
MUSI 3351	Music and Social Justice	4
MUSI 3401	Hip Hop in the Music Industry	4
MUSI 5900	Ethnography in Creative Industries	4

## GPA Requirement

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

### Music, Minor

The minor in music offers students an opportunity to explore electives in music along with a music theory course appropriate to the student's level of experience. The foundation of the minor is a unique introductory course, Music in Everyday Life (MUSC 1001), which investigates many dimensions of the musical experience and music's contributions to culture.

### Minor Requirements

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

A grade of C or better is required in all music courses.

### Music Theory and Musicianship

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
Complete one course from the following. Music theory placement test permits placement into Music Theory 1 or higher.		4
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 1201	Music Theory 1	
MUSC 1202	Music Theory 2	
MUSI 1204	Analyzing Popular Genres	

### Music Literature Electives

Code	Title	Hours
Complete two courses from the following. Four semesters of ensembles and/or lessons may be substituted for one elective:		8
MUSC 1106	Women in Music	
MUSC 1111	Rock Music	
MUSC 1112	Jazz	
MUSC 1113	Film Music	
MUSC 1116	Beethoven	
MUSC 1118	Music Therapy 1	
MUSC 1131	Music of Latin America and the Caribbean	
MUSC 1136	What's Playing at Symphony?	
MUSC 1144	Music and Technology: Stone Age to Digital Age	
MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2130	Music of Asia	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2312	Historical Traditions: Classical	
MUSC 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 3352	Sounding Human
MUSC 3353	Music and the Racial Imagination
MUSC 3560	Topics in Music since 1900
MUSC 3470	War and Music
MUSI 3351	Music and Social Justice
MUSI 3401	Hip Hop in the Music Industry
MUSI 5900	Ethnography in Creative Industries

### Lessons and Ensembles

All lessons and ensembles are 1 credit:

MUSC 1901	Music Lessons 1
MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra
MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble
MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 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. *Students must complete all required music courses with grades of C or better.*

### Music Composition, Minor

The minor in composition offers student composers at all levels a concentrated opportunity to build composition skills. The minor includes a foundation in music theory and introduction to compositional approaches, composition lessons, and additional course work to broaden the student composer's understanding and appreciation of the intersection of music and culture.

### Minor Requirements

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

### Required Courses

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
MUSC 1301	Introduction to Composition	4
MUSC 1903	Composition Lessons	1

**Elective**

Code	Title	Hours
Complete one of the following:		4
MUSC 3541	Music Analysis Seminar	
MUST 1220	Introduction to Music Technology	
MUST 2320	Sound Design	

**GPA Requirement**

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

**Music Industry, Minor**

The music industry program is the first such undergraduate program offered in Boston and is designed for students with an interest in fields such as artist management; the music products industry; the recording industry; arts administration; contracting and legal issues; financial and economics aspects of the music industry; and broadcast, mobile, and online media technologies.

**Minor Requirements**

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

A C grade or better is required in all music courses.

**Music Core**

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4

**Music Industry**

Code	Title	Hours
MUSI 1230	Introduction to Music Industry	4

**Music Industry Electives**

Code	Title	Hours
Complete three of the following:		12
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 2210	Introduction to Songwriting	
MUSC 2211	Advanced Songwriting	
MUSI 2231	Music Licensing for Media	
MUSI 2232	Music Recording 1	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2341	Music Supervision 1	
MUSI 2540	Special Topics in Music Industry	
MUSI 3332	Artist Management	
MUSI 3333	The Record Industry	
MUSI 3334	Music Products Industry	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 4530	Music Entrepreneurship	
MUSI 4601	Seminar in Music Industry	

MUSI 5900	Ethnography in Creative Industries
MUST 1220	Introduction to Music Technology

**GPA Requirement**

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

**Music Performance, Minor**

The minor in music performance offers students an opportunity to improve on their instrument or voice through ensemble performance, private lessons, recitals, and instruction in music theory. Students also take an elective in music that can be used to explore a genre, musical culture, or composer related to the student's performance area or can be used to broaden the student's musical horizons beyond their area of focus.

**Minor Requirements**

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

*Note:* Acceptance into the minor requires an audition.

**Music Core**

A grade of C or higher is required in music theory courses:

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4
MUSC 1201	Music Theory 1	4

**Music Lessons**

Code	Title	Hours
Complete four music lesson courses (courses are repeatable):		4
MUSC 1901	Music Lessons 1	
MUSC 1902	Music Lessons 2	

**Music Ensemble**

Code	Title	Hours
Complete five music ensembles:		5
MUSC 1904	Chorus	
MUSC 1905	Concert Band	
MUSC 1906	Orchestra	
MUSC 1907	Wind Ensemble	
MUSC 1911	Jazz Ensemble	
MUSC 1912	Rock Ensemble	
MUSC 1913	Blues/Rock Ensemble	
MUSC 1914	Create Your Own Music	
MUSC 1915	Chamber Ensemble	
MUSC 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 1111	Rock Music	
MUSC 1112	Jazz	
MUSC 1113	Film Music	
MUSC 1116	Beethoven	
MUSC 1131	Music of Latin America and the Caribbean	
MUSC 1136	What's Playing at Symphony?	
MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2130	Music of Asia	
MUSC 2208	Jazz Improvisation	
MUSC 2209	Conducting	
MUSC 2210	Introduction to Songwriting	
MUSC 2310	Popular Music Since 1945	
MUSC 2312	Historical Traditions: Classical	
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 3560	Topics in Music since 1900	
MUSI 3351	Music and Social Justice	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	

## Music Recitals

Code	Title	Hours
MUSC 3410	Recital 1	1
MUSC 4622	Recital 2	1

## GPA Requirement

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*

### Music Recording, Minor

The minor in music recording offers students a chance to explore the theory and practice of recording from basic principles through studio sessions and mixing/mastering. An elective rounds out the minor, giving students an opportunity to learn about the intersection of recording and copyright, technology, entertainment, and other disciplines.

## Minor Requirements

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

## Required Courses

Code	Title	Hours
MUSI 2232	Music Recording 1	4
MUSI 2331	Music Recording 2	4
MUSI 3341	Music Recording 3—Mixing and Mastering	4

## Recording Elective

Code	Title	Hours
Complete one of the following:		4
MUSC 1001	Music in Everyday Life	
MUSI 2341	Music Supervision 1	
MUST 1220	Introduction to Music Technology	
MUSI 2235	Copyright in the Creative Industries	
MUST 2320	Sound Design	

## GPA Requirement

2.000 GPA required in the minor. Students must complete all required music courses with grades of at least C.

### Music Technology, Minor

The minor in music technology gives students an opportunity to explore the creative application of digital 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

## Music Technology Electives

Code	Title	Hours
Complete two of the following:		8
MUSC 2111	Algebra and Geometry of Music	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2350	Acoustics and Psychoacoustics of Music	
MUST 2320	Sound Design	
MUST 3540	Special Topics in Music Technology	

## GPA Requirement

2.000 GPA required in the minor. *Students must complete all required music courses with grades of at least C.*



## Musical Theatre, Minor

Uniting acting, singing, and dance, the musical theatre minor provides foundational skills in musical theatre performance and the exploration of the culture and evolution of the musical form. This minor combines theatre courses in performance and Broadway history with additional course options from the Department of Music.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

Note: Students pursuing a music theatre minor may double count up to one course between that minor and the student's declared major and other minors.

### For Theatre Majors (Not Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1500	Musical Theatre Performance 1	4
MUSC 1119	Fundamentals of Western Music Theory	4
or MUSC 1201	Music Theory 1	

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		8
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

### For Music Majors (Not Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		8
THTR 1101	Introduction to Theatre	
MUSC 1142	Pop, Jazz, and Rock Singing	

THTR 1150	Dance Performance and History: Modern to Hip Hop
THTR 1260	Movement for the Actor
MUSC 2107	Introduction to Opera
MUSC 2150	Making a Musical: Analysis, Craft, and Creation
THTR 2310	History of Musical Theatre
THTR 3570	Musical Theatre Performance 2

### For All Other Majors (Including Combined Majors):

#### REQUIRED COURSES

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

#### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

#### ELECTIVES

Code	Title	Hours
Complete two of the following:		8
THTR 1101	Introduction to Theatre	
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

### GPA Requirement

2.000 GPA required in the minor

## Performing Arts Administration, Minor

Connecting a range of College of Arts, Media and Design courses, this minor prepares students to work in non-profit arts organizations such as theatre companies, concert venues, and performance centers. Students have an opportunity to develop valuable skills in artistic programming, marketing, organizational communication, public relations, community outreach, and the entertainment business.

### Program Requirements

Complete all courses listed below unless otherwise indicated.

Students pursuing a performing arts administration minor may double count up to one course between that minor and the student's declared major and other minors. Should a student place out of a course in a minor it must be replaced with another course.

Notes:

- No student may receive a theatre minor as a result of external transfer credit only.

- Music majors cannot use Performing Arts Administration (MUSI 2330) as a major elective due to double-counting policy outlined above.

## Foundational Courses

Code	Title	Hours
Complete one of the following:		
THTR 1101	Introduction to Theatre	4
MUSC 1001	Music in Everyday Life	
MUSI 1230	Introduction to Music Industry	

## Required Course

Code	Title	Hours
MUSI 2330	Performing Arts Administration	4

## Electives

Code	Title	Hours
Complete two of the following (prerequisites may apply):		
COMM 1113	Business and Professional Speaking	8
COMM 1231	Principles of Organizational Communication	
COMM 2350	Producing for the Entertainment Industry	
COMM 2650	The Business of Entertainment	
COMM 3451	Advertising Practices	
JRNL 3425	Public Relations Principles	
MUSI 2234	Festivals	
MUSI 2235	Copyright in the Creative Industries	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
THTR 2335	Boston Theatre Experience	
AACE 6000	Arts and Culture Organizational Leadership	

## GPA Requirement

2.000 GPA required in the minor

### Songwriting, Minor

The minor in songwriting offers students a chance to build songwriting skills through classes that focus on craft, collaboration, music theory, and songwriting business practice.

## Minor Requirements

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

## Required Courses

Code	Title	Hours
<b>Music Theory</b>		
Complete one of the following:		
MUSC 1119	Fundamentals of Western Music Theory	4
MUSC 1201	Music Theory 1	
MUSI 1204	Analyzing Popular Genres	

## Songwriting

Code	Title	Hours
MUSC 2210	Introduction to Songwriting	4
<b>Songwriting Electives</b>		
Complete two of the following:		
MUSC 1001	Music in Everyday Life	8
MUSC 2211	Advanced Songwriting	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSI 2232	Music Recording 1	
MUSI 2235	Copyright in the Creative Industries	
MUSI 2331	Music Recording 2	

## GPA Requirement

2.000 GPA required in the minor. *Students complete all required music courses with grades of at least C.*

## Theatre

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

**Antonio Ocampo-Guzman**  
Associate Professor and Chair

448 Ryder Hall  
617.373.2244

Jesse Hinson, Associate Teaching Professor and Undergraduate Coordinator, [j.hinson@northeastern.edu](mailto:j.hinson@northeastern.edu)

Jonathan Carr, Assistant Teaching Professor and Mentor for Minors, [jo.carr@northeastern.edu](mailto:jo.carr@northeastern.edu)

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.

Our multidimensional students develop a unique understanding of creative leadership. They are actors, directors, designers, technicians, playwrights, stage managers, producers, and administrators. 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.

We produce a diverse season of productions ranging from classical theatre to musicals to world premieres. Nearly 50 performances take place annually in the Studio Theatre and Ryder Theatre Lab, where students collaborate with faculty and professional guest artists to achieve the highest standard of professionalism. With more than 40 co-op partners around the globe, students can connect classroom and stage experiences with the professional world.

## Academic Progression Standards

Students must receive a minimum grade of 2.000 in major courses. The following courses are recommended to be taken by the end of the fourth semester (third semester for transfer students):

Code	Title	Hours
THTR 1100	Production Experience 1	1
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4

THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

## Programs

### Bachelor of Arts (BA)

- Theatre (p. 236)
- Communication Studies and Theatre (p. 143)
- Cultural Anthropology and Theatre (p. 244)
- English and Theatre (p. 245)
- Media and Screen Studies and Theatre (p. 167)
- Theatre and Interaction Design (p. 120)

### Bachelor of Science (BS)

- Theatre (p. 238)
- American Sign Language and Theatre (p. 241)
- Media and Screen Studies and Theatre (p. 180)
- Theatre and Interaction Design (p. 121)

### Minors

- Theatre (p. 254)
- Global Fashion Studies (p. 255)
- Musical Theatre (p. 234)
- Playwriting (p. 256)
- Performing Arts Administration (p. 234)
- Professional Presentation (p. 189)
- Theatrical Design (p. 257)
- Theatre, Performance, and Social Change (p. 258)

## Theatre, BA

The Northeastern Department of Theatre is dedicated to creativity, collaboration, and excellence in the pursuit of innovative ways to see, to investigate, and to make theatre for a new generation. We offer students a transformative theatre education by aligning performance and production with academic inquiry and professional experiential learning. Our multidimensional students develop a unique understanding of professionalism and entrepreneurship as the foundations of meaningful careers. We embrace diverse methods, philosophies, and measures of success. Through values of generosity, integrity, respect, and rigor, we explore theatre as a living art that engages with our global society and the moment in which we live.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Analyzing and Using Data (AD) must be met through general electives.

### Theatre Major Requirements

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

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000	Theatre at Northeastern	1
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
THTR 4100	Senior Career Seminar	1

### Theatre Texts and Context

At least one the Theatre Texts and Contexts course must be at the 2000-level or above.

Complete one of the following: 4

THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3200	Queer Theatre and Performance	
Complete one of the following:		4
THTR 1215	Activism and Performance	
THTR 2340	Theatre and Society	
THTR 3100	Creative Storytelling for Social Engagement	

### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 3702	Rehearsal and Production: The Art of Collaboration	1
THTR 4702	Capstone Rehearsal and Performance	4

### Advanced Technique

Complete one of the following: 4

Students concentrating in theatre performance should complete THTR 3300, THTR 3450 or THTR 3550.

Students concentrating in production should complete THTR 3550

THTR 3300	Devised Theatre Project: Collaborative Performance	
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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. 237).

Code	Title	Hours
Complete five of the following:		20
THTR 1215	Activism and Performance	
THTR 1260	Movement for the Actor	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
INAM 5100	Performance Studies	

## Theatre Major Credit Requirement

Complete 61 semester hours in the major. The performance and production concentrations require 68 semester hours.

## Program Requirement

132 total semester hours required

## Theatre Performance Concentration

A minimum grade of C is required for all theatre courses in the performance concentration.

Code	Title	Hours
<b>Performance</b>		
THTR 1260	Movement for the Actor	4
THTR 2342	Acting 2	4

THTR 2600	Voice and Speech for the Actor	4
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## 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 Making	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage (Designing Combat for the Stage)	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
INAM 5100	Performance Studies	

## Theatre Production Concentration

A minimum grade of C is required for all theatre courses in the production concentration.

Code	Title	Hours
<b>Design and Production</b>		
Complete four of the following:		16
THTR 1230	The Evolution of Fashion and Costume	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	

## 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 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
INAM 5100	Performance Studies

## Plan of Study

Theatre, BA

### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000	1	THTR 1131	4	Elective	4	Vacation	0
THTR 1100	1	Theatre texts and context #1	4	Elective	4		
THTR 1101	4	Theatre elective #1	4				
THTR 1120	4	Elective	4				
ENGW 1111	4						
Elective	4						
	18		16		8		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1270	4	Co-op #1		Co-op #1	0	Foreign Language	4
THTR 2000	1	Online elective	4			Elective	4
THTR 2325	4						
Theatre Elective #2	4						
Elective	4						
EEAM 2000	1						
	18		4		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 3702	1	Co-op #2		Co-op #2		Elective	4
Theatre texts and context #2	4	Online elective	4			Elective	4
Theatre elective #3	4						

Foreign language	4			
Elective	4			
	17	4	0	8

#### Year 4

Fall	Hours	Spring	Hours
THTR 4100	1	THTR 4702	4
Theatre elective #4	4	Theatre advanced technique	4
Foreign Language	4	Elective	4
Theatre elective #5	4	Elective	4
Elective	4		
	17		16

Total Hours: 134

## Theatre, BS

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### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

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NUpath requirements Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Analyzing and Using Data (AD) must be met through general electives.

### Theatre Major Requirements

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

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000	Theatre at Northeastern	1
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
THTR 4100	Senior Career Seminar	1

### Theatre Texts and Context

At least one the Theatre Texts and Contexts course must be at the 2000-level or above.

Complete one of the following: 4

THTR 1220	Race, Power, and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3200	Queer Theatre and Performance	

Complete one of the following: 4

THTR 1215	Activism and Performance	
THTR 2340	Theatre and Society	
THTR 3100	Creative Storytelling for Social Engagement	

### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 3702	Rehearsal and Production: The Art of Collaboration	1
THTR 4702	Capstone Rehearsal and Performance	4

### Advanced Technique

Complete one of the following: 4

Students concentrating in theatre performance should complete THTR 3300, THTR 3450 or THTR 3550.

Students concentrating in production should complete THTR 3550 or THTR 3600.

THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3450	Acting 3—Playing Shakespeare (Theatre Performance Concentration)	
THTR 3550	Directing for the Stage	

### Electives

Complete the following electives or choose one of the concentrations below (p. 239).

Code	Title	Hours
Complete five of the following: 20		
THTR 1215	Activism and Performance	
THTR 1260	Movement for the Actor	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	

THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
INAM 5100	Performance Studies	

### Theatre Major Credit Requirement

Complete 61 semester hours in the major. The performance and production concentrations require 68 semester hours.

### Program Requirement

132 total semester hours required

### Theatre Performance Concentration

A minimum grade of C is required for all theatre courses in the performance concentration.

Code	Title	Hours
<b>Performance</b>		
THTR 1260	Movement for the Actor	4
THTR 2342	Acting 2	4
THTR 2600	Voice and Speech for the Actor	4
<b>Electives</b>		
Complete three of the following:		12
THTR 1215	Activism and Performance	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	



THTR 2380	Costume Design
THTR 2385	Fashion Construction and Pattern Making
THTR 2400	Scenic Design
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3400	Designing Combat for the Stage
THTR 3450	Acting 3—Playing Shakespeare
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
INAM 5100	Performance Studies

### Theatre Production Concentration

A minimum grade of C is required for all theatre courses in the production concentration.

Code	Title	Hours
<b>Design and Production</b>		
Complete four of the following:		16
THTR 1230	The Evolution of Fashion and Costume	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
<b>Electives</b>		
Complete two of the following:		8
THTR 1215	Activism and Performance	
THTR 1235	Fashion and Costume Design in Film and Television	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2385	Fashion Construction and Pattern Making	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3550	Directing for the Stage	

THTR 3570	Musical Theatre Performance 2
INAM 5100	Performance Studies

### Plan of Study Theatre, BS

#### SAMPLE FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000	1	THTR 1131	4	Elective	4	Vacation	0
THTR 1100	1	Theatre texts and context #1	4	Elective	4		
THTR 1101	4	Theatre elective #1	4				
THTR 1120	4	Elective	4				
ENGW 1111	4						
Elective	4						
		18		16		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 2000	1	Co-op #1		Co-op #1	0	Elective	4
THTR 1270	4	Online elective	4			Elective	4
THTR 2325	4						
Theatre Elective #2	4						
Elective	4						
EEAM 2000	1						
		18		4		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 3702	1	Co-op #2		Co-op #2		Elective	4
Theatre texts and context #2	4	Online Elective	4			Elective	4
Theatre elective #3	4						
Elective	4						
Elective	4						
		17		4		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 4100	1	Theatre advanced technique	4				
Theatre elective #4	4	THTR 4702	4				
Theatre elective #5	4	Elective	4				
Elective	4	Elective	4				
Elective	4						
		17		16			

Total Hours: 134

## American Sign Language and Theatre, BS

The American Sign Language (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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
DEAF 2700	ASL Linguistics	4
LING 1150	Introduction to Language and Linguistics	4
<b>Performance Interpreting</b>		
INTP 3550	Performance Interpreting—Interpreting for the Theatre	4

### Interpreting

INTP 3500	The Interpreting Profession	2
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### Theatre Requirements

Code	Title	Hours
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#### Theatre

A grade of C or higher is required for all theatre courses.

#### Foundational Stages

THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

#### Theatre Texts and Context

Choose one of the following:		
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

#### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1

#### Intermediate or Advanced Technique

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	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

### Integrative Requirement

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
THTR 4702	Capstone Rehearsal and Performance	4

### Combined-Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses  
Minimum 2.500 overall GPA required

## Combined-Major Credit/Grade Requirement

Complete 88 semester hours in the major. A minimum grade of C is required for all theatre courses.

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, One Co-op

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 1101	4	AMSL 1102	4	Elective	4	Vacation	0
DEAF 1500	4	THTR 1120	4	Elective	4		
THTR 1100	1	THTR Text & Context 1	4				
THTR 1101	4	Elective	4				
ENGW 1111	4						
		17		16		8	
						0	

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
LING 1150	4	DEAF 2700	4				
DEAF 2500	4	THTR 1131	4				
THTR 1270	4	THTR Intermediate or Advanced 1	4				
THTR 2000	1						
		17		16		0	
						0	

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTP 3550 or 3510	4	Co-op #1		Co-op #1	0	Elective	4
THTR 2325	4					Elective	4
INTP 3500	2						
Elective	4						
Elective	4						
EEAM 2000	1						
		19		0		0	
						8	

#### Year 4

Fall	Hours	Spring	Hours
ENGW 3315	4	THTR 4702	4
THTR Intermediate or Advanced 2	4	INTP 4940	4
Elective	4	AMSL 3101	4
Elective	4	Elective	4
		16	
		16	

Total Hours: 133

## Communication Studies and Theatre, BA

The Departments of Theatre and Communication Studies offer an interdisciplinary combined major that unites the artistic dimensions of

theatre with the practical skills and theories in communication studies. The program provides both the creative study of theater performance, literature, playwriting, and directing with the ability to research and deliver a compelling speech and think critically and write effectively. The two disciplines unite in shared values of original personal expression, professional collaboration, and experiences in the cultural, social, and ethical impact of theatre as human communication.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Creative Expression/Innovation (EI), Societies and Institutions (SI), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Difference and Diversity (DD) may be met through electives in the major.

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1000	Communication Studies at Northeastern	1
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

### Foundation Course

Complete one of the following:	4
COMM 1210	Persuasion and Rhetoric
COMM 1231	Principles of Organizational Communication
COMM 1225	Communication Theory
COMM 1255	Communication in a Digital Age

### Cluster Course

Complete one of the following:	4
COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

### Writing-Intensive Courses

Complete two of the following:	8
COMM 3200	Mobile Communication

COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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 COMM courses.	12
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**Theatre Requirements**

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Choose one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate or Advanced Technique</b>		
Choose two of the following:		8
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

**Making Theatre**

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

**Integrative Requirements**

Code	Title	Hours
<b>Theatre Capstone</b>		
THTR 4702	Capstone Rehearsal and Performance	4
<b>Communication Studies Integrative Course</b>		
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 Four Years, Two Co-ops in Spring/Summer**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or THTR 1000	1	COMM 1112 or 2301	4	Communication studies foundation course	4	Vacation	
COMM 1101	4	THTR 1131	4	Communicatc studies elective	4		
THTR 1100	1	Foreign language course or elective	4				
THTR 1101	4	ENGW 1111	4				
THTR 1120	4						
Foreign language elective or THTR elective	4						
		18			16		
						8	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication studies cluster course	4	Co-op #1	4	Co-op #1	4	Elective	4
Communicatc studies elective	4					Elective	4
THTR 2000	1						
THTR 2325	4						
Theatre text and context	4						

EEAM 2000	1						
	18	0	0	8			
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
THTR 1270	4	Comm writing intensive	4	Optional Co-op #2	0	Optional Co-op #2	0
THTR intermediate or advanced	4	Comm elective	4				
Foreign language or elective	4	Elective	4				
ENGW 3314 or 3315	4	Elective	4				
	16		16		0		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Communication studies writing-intensive	4	THTR 4702	4				
THTR Intermediate or advanced elective 2	4	Comm integrative course	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
	16		16				

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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
<b>Advanced Area Courses</b>		
Complete two of the following:		
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Anthropology Electives

Complete three courses in the following range. Two study-abroad courses may count toward this requirement with prior permission from the department: 12

ANTH 2300 to ANTH 4999

### Social Science Electives

Complete three social science courses from the following subject areas: 12

AFRS, AFAM, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, PSYC, SOCL

### Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following: 4		
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Intermediate or Advanced Technique</b>		
Complete two of the following: 8		
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	

THTR 2345	Acting for the Camera
THTR 2346	Viewpoints
THTR 2370	Lighting Design
THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3450	Acting 3—Playing Shakespeare
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3400	Designing Combat for the Stage

### Integrative Requirements

Code	Title	Hours
Note: THTR 4702 is permitted to also count as an integrative course.		
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 Theatre and Department of English offer an interdisciplinary combined major that integrates performance, design, production, and dramatic literature with literary studies, digital humanities, and creative writing. This combined major offers both classroom and experiential learning in making theatre, playwriting, and dramaturgy with the study of the diverse historical, cultural, and aesthetic contexts of literature. Students develop the capacity for interpreting a variety of texts through performance and writing to engage audiences.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	



ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts

ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	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

**Theatre Requirements**

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000	Theatre at Northeastern	1
or ENGL 1000	English at Northeastern	
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following: 4		
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Intermediate or Advanced Technique</b>		
Complete two of the following: 8		
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	

THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 3100	Creative Storytelling for Social Engagement

ENGL Theories & Methods requirement	4	ENGL diversity requirement	4	Elective	4
THTR Intermediate or Advanced Technique elective	4	THTR Intermediate or Advanced Technique	4		
THTR Text and Context elective	4	Elective	4		
		16	16	8	0

### Integrative Requirements

Courses used in the integrative requirements cannot double-count in other areas of the major.

Code	Title	Hours
<b>Integrative Courses</b>		
ENGL 1600	Introduction to Shakespeare	4
THTR 2315	Rebels of Modern Drama	4
or THTR 2320	Classics of 20th-Century American Drama	

### English and Theatre Major Credit Requirement

90 semester hours required in the major

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, One Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000 or ENGL 1000	1	THTR 1131	4	Elective	4	Vacation	
THTR 1100	1	ENGL 1160 or 1410	4	Elective	4		
THTR 1101	4	THTR 1270	4				
THTR 1120	4	ENGL elective	4				
ENGL 1400	4						
ENGL comparative requirement	4						
		18	16	8			0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL 1600	4	Co-op		Co-op		Vacation	
THTR 2000	1						
THTR 2325	4						
THTR 2315 or 2320	4						
ENGL pre-19th-century requirement	4						
EEAM 2000	1						
		18	0	0			0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL 19th-, 20th-, or 21st-Century requirement	4	Foreign Language	4	Foreign Language	4	Vacation	

Year 4			
Fall	Hours	Spring	Hours
ENGL writing requirement	4	THTR 4702	4
ENGL elective	4	Foreign Language	4
Elective	4	ENGL Capstone	4
Elective	4	Elective	4
		16	16

Total Hours: 132

## Media and Screen Studies and Theatre, BA

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design with related studies in screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices of making theatre, film, and television as engaged citizens and creative artists.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirement Natural and Designed World (ND) must be met through general electives.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirement</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Courses</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## Theatre Requirements

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	

THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

## Integrative Requirement

Code	Title	Hours
<b>Media and Screen Studies Capstone</b>		
MSCR 4623	Theories of Media and Culture	4
<b>Theatre Capstone</b>		
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

### Sample Four Years, Two Co-ops

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective
						4

MSCR 1220	4	MSCR Foundation	4	Elective	4	Elective	4	
THTR 1101	4	THTR 1131	4					
THTR 1120	4	THTR 1270	4					
ENGW 1111	4							
	17		16			8		8
<b>Year 2</b>								
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>	<b>Hours</b>
MSCR Diversity/Globalization	4	Co-op		Co-op		Foreign language core course		4
MSCR Elective	4					Elective		4
THTR 2325	4							
THTR texts and context elective	4							
EEAM 2000	1							
THTR 1100	1							
	18		0			0		8
<b>Year 3</b>								
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>	<b>Hours</b>
MSCR Writing Intensive	4	Co-op		Co-op		Elective		4
MSCR Elective	4					Elective		4
Intermediate or advanced technique elective	4							
Foreign language core course	4							
THTR 2000	1							
	17		0			0		8
<b>Year 4</b>								
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>					
MSCR Writing Intensive	4	MSCR 4623	4					
Intermediate or advanced technique elective	4	MSCR Elective	4					
Foreign language core course	4	Elective	4					
THTR 4702	4	Elective	4					
	16		16					

Total Hours: 132

## Media and Screen Studies and Theatre, BS

This major is designed for students who want to combine a knowledge of the art of theatre with the theories and conceptual frameworks of media and film studies. It offers both classroom and experiential learning in areas of acting, directing, playwrighting, and design with related studies in

screenwriting, media technology, and media production. Students have an opportunity to develop a personalized technique for the practices of making theatre, film, and television as engaged citizens and creative artists.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), and Societies and Institutions (SI) are met through the major course requirements.

NUPath requirements Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUPath requirement Natural and Designed World (ND) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	

ARTD 3480	Video: Sound and Image
ARTD 3485	Experimental Video
COMM 1450	Sound Production for Digital Media
COMM 2550	Television Field Production
COMM 2655	Television Studio Production
COMM 3655	Digital Editing for TV
COMM 3750	Special Effects and Postproduction for Television
COMM 4755	Production Capstone

**Theatre Requirements**

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	

THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2

**Integrative Requirement**

Code	Title	Hours
<b>Media and Screen Studies Capstone</b>		
MSCR 4623	Theories of Media and Culture	4
<b>Theatre Capstone</b>		
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**

**Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Elective	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Electives	4
THTR 1101	4	THTR 1131	4				
THTR 1120	4	THTR 1270	4				
ENGW 1111	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
THTR 2325	4						
THTR texts and context elective	4						
EEAM 2000	1						
THTR 1100	1						
		18		0		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR writing-intensive	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
Intermediate or advanced technique elective	4						
THTR 2000	1						
Elective	4						
		17		0		0	

Year 4		
Fall	Hours Spring	Hours
MSCR writing-intensive	4 MSCR 4623	4
Intermediate or advanced technique elective	4 MSCR elective	4
Elective	4 Elective	4
THTR 4702	4 Elective	4
	16	16

Total Hours: 132

## Theatre and Interaction Design, BA

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Theatre Requirements

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

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1

THTR 4702	Capstone Rehearsal and Performance	4
<b>Major Elective</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate/Advanced Electives</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2300	Classics of Global Theatre	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

### Interaction Design Requirements

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition	4
ARTF 2223	Experience and Interaction	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250 and ARTG 2251	Typography 1 and Type Tools	5
ARTG 2260	Programming Basics	4
ARTG 2400 and ARTG 2401	Interaction Design 1: Responsive and Interaction Design Tools	5
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Design Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Major Electives</b>		



*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 Elective*

Complete one of the following:		4
ARTD 2360	Introduction to Photography	
ARTD 2380	Video Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3460	Identity and Brand Design	
ARTG 3351	Time-Based Design	
ARTG 4552	Information Design 2	
ARTG 4553	Environmental Information Design	
ARTG 4554	Typography 3	

**Integrative Requirement**

Code	Title	Hours
Note: ARTG 4550 double counts with the specified requirements above.		
ARTG 4550	Design Degree Project 1	4
THTR 4702	Capstone Rehearsal and Performance	4

**Theatre and Interaction Design Combined Major Credit Requirement**

Complete 96 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4	Elective	4	
THTR 1120	4	THTR 1131	4	Elective	4	Elective	4	
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4					
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4					
ARTG 1250	4							
		17			16			8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
EEAM 2000	1	Co-op 1		Co-op 1		Elective	4	
Art + design history elective 1	4					Elective	4	
THTR 2000	1							
THTR 1270	4							
ARTG 2260	4							
THTR 2325	4							
		18			0	0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2		Elective	4	
ARTG 3350	4					Elective	4	
Art + design elective 1	4							
THTR elective	4							
		16			0	0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Art + design history elective 2	4	THTR 4702	4	Vacation		Vacation	0	
THTR elective	4	THTR advanced technique	4					
ARTG 3700	4	ARTG 3451	4					
ARTG 4550 or 4700	4	Elective	4					
THTR 4100	1							
		17			16	0		0

Total Hours: 132

**Theatre and Interaction Design, BS**

This program is designed for students who want to combine a knowledge of the art of theatre with the theories and practice-based design disciplines. It offers both classroom and experiential learning in areas of acting, directing, playwriting, and design practices. Design is the practice-based discipline raising important questions about—and providing significant answers to—how we live. Designers are needed when we don't know what is needed. Designers propose alternative futures and create new choices using design principles and processes to create, compose, and construct meaning in diverse knowledge fields. Designers seek a broad understanding of principles and systems of perception, communication, and action.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Theatre Requirements

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

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Major Electives</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Intermediate/Advanced Electives</b>		
Complete two of the following:		8
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2300	Classics of Global Theatre	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	

THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2

### Interaction Design Requirements

Code	Title	Hours
<b>Art + Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
<b>Art + Design Fundamentals</b>		
ARTF 1122	Color and Composition	4
ARTF 2223	Experience and Interaction	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250 and ARTG 2251	Typography 1 and Type Tools	5
ARTG 2260	Programming Basics	4
ARTG 2400 and ARTG 2401	Interaction Design 1: Responsive and Interaction Design Tools	5
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
ARTG 3700	Interaction Design 2: Mobile	4
<b>Design Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Major Electives</b>		
<i>Art + Design History</i>		
Complete two of the following:		8
ARTH 1111	Global Art and Design History: Renaissance to Modern	
ARTH 2210	Modern Art and Design History	
ARTH 2215	History of Graphic Design	
<i>Art + Design Elective</i>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography	
ARTD 2380	Video Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time	
ARTG 2252	Graphic Design 1	
ARTG 3250	Physical Computing	
ARTG 3460	Identity and Brand Design	
ARTG 3351	Time-Based Design	
ARTG 4552	Information Design 2	
ARTG 4553	Environmental Information Design	
ARTG 4554	Typography 3	

### Integrative Requirement

Code	Title	Hours
Note: ARTG 4550 double counts with the specified requirements above.		
ARTG 4550	Design Degree Project 1	4
THTR 4702	Capstone Rehearsal and Performance	4

## Theatre and Interaction Design Combined Major Credit Requirement

Complete 96 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000 or ARTF 1000	1	THTR 1101	4	Elective	4	Elective	4
THTR 1120	4	THTR 1131	4	Elective	4	Elective	4
ENGW 1111	4	ARTF 2223 (with optional ARTF 2224)	4				
ARTF 1122 (with optional ARTF 1123)	4	ARTG 2250 (with optional ARTG 2251)	4				
ARTG 1250	4						
	17		16		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Co-op 1		Co-op 1		Elective	4
Art + design history elective 1	4					Elective	4
THTR 2000	1						
THTR 1270	4						
ARTG 2260	4						
THTR 2325	4						
	18		0		0		8

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 2400 (with optional ARTG 2401)	4	Co-op 2		Co-op 2		Elective	4
ARTG 3350	4					Elective	4
Art + design history elective 1	4						
THTR elective	4						
	16		0		0		8

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Art + design history elective 2	4	THTR 4702	4	Vacation		Vacation	0
THTR elective	4	THTR advanced technique	4				
ARTG 3700	4	ARTG 3451	4				

ARTG 4550 or 4700	4	Elective	4		
THTR 4100	1				
	17		16	0	0

Total Hours: 132

### Theatre, Minor

Theatre minors select a dynamic artistic path that uniquely matches their personal interests in areas such as acting, stage design, technical production, and dramatic literature, whether for career exploration or creative expression. Minors are active participants in department productions who develop the foundational techniques and collaborative skills to make imaginative, innovative theatre.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

*Note:* No student may receive a theatre minor as a result of external transfer credit only.

### Required Course

Code	Title	Hours
THTR 1101	Introduction to Theatre	4

### Foundational Courses

Code	Title	Hours
Complete one of the following:		4
THTR 1130	Introduction to Acting	
THTR 1131	Technical Theatre 1	
THTR 1270	Introduction to Theatrical Design	
THTR 2325	From Script to Stage	

### Electives

Code	Title	Hours
Choose two courses from the following options (prerequisites may apply):		8

THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	
THTR 1131	Technical Theatre 1	
THTR 1160	The Professional Voice	
THTR 1215	Activism and Performance	
THTR 1270	Introduction to Theatrical Design	
THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2325	From Script to Stage	
THTR 2330	Playwriting	
THTR 2335	Boston Theatre Experience	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	

THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 2600	Voice and Speech for the Actor
THTR 3300	Devised Theatre Project: Collaborative Performance
THTR 3450	Acting 3—Playing Shakespeare
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3400	Designing Combat for the Stage

## Making Theatre

Code	Title	Hours
Participate in a theatre department production:		
THTR 1100	Production Experience 1	1

## GPA Requirement

2.000 GPA required in the minor

## Global Fashion Studies, Minor

The international scope of this multidisciplinary minor is on the context, culture, practices, and trends in the fashion industry. It is designed for students interested in fashion marketing, retailing, media, and technology. Students have an opportunity to learn to identify, analyze, and communicate how the fashion industry functions artistically, socially, historically, and economically in a global market.

## Minor Requirements

Complete all courses listed below unless otherwise indicated.

A student pursuing the minor in global fashion studies may double count up to one course between this minor and the student's declared major(s) and minor(s).

## Required Courses

Code	Title	Hours
Complete one of the following:		4
THTR 1236	Introduction to Global Fashion Studies: History, Theory, and Contemporary Practice	
THTR 1237	Introduction to Global Fashion Studies Abroad: History, Theory, and Contemporary Practice	

## Electives

Code	Title	Hours
Complete two of the following:		8
ARTE 4901	Special Topics in Art and Design Studio (Fashion Photography Only)	
THTR 1230	The Evolution of Fashion and Costume	
THTR 1233	Nineteenth- and Twentieth-Century Fashion in Europe	
THTR 1235	Fashion and Costume Design in Film and Television	

THTR 1240	Fashion Industry and Trend Forecasting in Europe	
THTR 2242	Fashion Retailing	
THTR 2385	Fashion Construction and Pattern Making	
THTR 3350	Fashion Marketing and Merchandising in Europe	
Complete one of the following OR a third course from the list above:		4
ARTD 2350	Photo Basics for Nonmajors	
ARTG 1250	Design Process Context and Systems	
ARTG 2260	Programming Basics	
COMM 3445	Public Relations Principles	
COMM 3451	Advertising Practices	
JRNL 3425	Public Relations Principles	
JRNL 5310	Photojournalism	
THTR 2380	Costume Design	

## GPA Requirement

2.000 GPA required in the minor

## Musical Theatre, Minor

Uniting acting, singing, and dance, the musical theatre minor provides foundational skills in musical theatre performance and the exploration of the culture and evolution of the musical form. This minor combines theatre courses in performance and Broadway history with additional course options from the Department of Music.

## Minor Requirements

Complete all courses listed below unless otherwise indicated.

Note: Students pursuing a music theatre minor may double count up to one course between that minor and the student's declared major and other minors.

## For Theatre Majors (Not Including Combined Majors):

### REQUIRED COURSES

Code	Title	Hours
THTR 1500	Musical Theatre Performance 1	4
MUSC 1119	Fundamentals of Western Music Theory	4
or MUSC 1201	Music Theory 1	

### MAKING MUSICAL THEATRE

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

### ELECTIVES

Code	Title	Hours
Complete two of the following:		8
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	

THTR 2310	History of Musical Theatre
THTR 3570	Musical Theatre Performance 2

**For Music Majors (Not Including Combined Majors):****REQUIRED COURSES**

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

**MAKING MUSICAL THEATRE**

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

**ELECTIVES**

Code	Title	Hours
Complete two of the following:		8
THTR 1101	Introduction to Theatre	
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

**For All Other Majors (Including Combined Majors):****REQUIRED COURSES**

Code	Title	Hours
THTR 1130	Introduction to Acting	4
THTR 1500	Musical Theatre Performance 1	4

**MAKING MUSICAL THEATRE**

Code	Title	Hours
Complete one of the following:		1
MUSC 1901	Music Lessons 1	
THTR 1100	Production Experience 1	

**ELECTIVES**

Code	Title	Hours
Complete two of the following:		8
THTR 1101	Introduction to Theatre	
MUSC 1119	Fundamentals of Western Music Theory	
MUSC 1142	Pop, Jazz, and Rock Singing	
THTR 1150	Dance Performance and History: Modern to Hip Hop	
THTR 1260	Movement for the Actor	
MUSC 2107	Introduction to Opera	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
THTR 2310	History of Musical Theatre	
THTR 3570	Musical Theatre Performance 2	

**GPA Requirement**

2.000 GPA required in the minor

**Playwriting, Minor**

This minor is designed for students interested in writing for stage and screen. Uniting the study of significant works of drama with the creative writing process, students explore diverse styles of plays, playwrights, theories, forms, and movements. This minor includes course options from the Departments of English, Communications Studies, and Media and Screen Studies.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated.

**Required Courses**

Code	Title	Hours
THTR 1101	Introduction to Theatre	4
THTR 2330	Playwriting	4

**Electives**

Code	Title	Hours
Complete two of the following:		8
ENGL 1600	Introduction to Shakespeare	
COMM 1511	Communication and Storytelling	
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2325	From Script to Stage	
THTR 2335	Boston Theatre Experience	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
MSCR 3389	Screenwriting	
THTR 3300	Devised Theatre Project: Collaborative Performance	

**GPA Requirement**

2.000 GPA required in the minor

**Performing Arts Administration, Minor**

Connecting a range of College of Arts, Media and Design courses, this minor prepares students to work in non-profit arts organizations such as theatre companies, concert venues, and performance centers. Students have an opportunity to develop valuable skills in artistic programming, marketing, organizational communication, public relations, community outreach, and the entertainment business.

**Program Requirements**

Complete all courses listed below unless otherwise indicated.

Students pursuing a performing arts administration minor may double count up to one course between that minor and the student's declared

major and other minors. Should a student place out of a course in a minor it must be replaced with another course.

**Notes:**

- No student may receive a theatre minor as a result of external transfer credit only.
- Music majors cannot use Performing Arts Administration (MUSI 2330) as a major elective due to double-counting policy outlined above.

### Foundational Courses

Code	Title	Hours
Complete one of the following:		
THTR 1101	Introduction to Theatre	4
MUSC 1001	Music in Everyday Life	
MUSI 1230	Introduction to Music Industry	

### Required Course

Code	Title	Hours
MUSI 2330	Performing Arts Administration	4

### Electives

Code	Title	Hours
Complete two of the following (prerequisites may apply):		
COMM 1113	Business and Professional Speaking	8
COMM 1231	Principles of Organizational Communication	
COMM 2350	Producing for the Entertainment Industry	
COMM 2650	The Business of Entertainment	
COMM 3451	Advertising Practices	
JRNL 3425	Public Relations Principles	
MUSI 2234	Festivals	
MUSI 2235	Copyright in the Creative Industries	
MUSI 3338	Music Industry Marketing and Promotion	
MUSI 3340	Concert Promotion and Venue Management	
THTR 2335	Boston Theatre Experience	
AACE 6000	Arts and Culture Organizational Leadership	

### GPA Requirement

2.000 GPA required in the minor

#### Professional Presentation, Minor

The professional presentation minor is intended for students interested in integrating the creativity of actor training and the practical techniques of public speaking. Students are offered an opportunity to create an individualized course of study to empower their voice and speech, cultivate an onstage persona, and develop high-impact presentation skills to enhance career prospects. This minor, which features classes offered by the Department of Theatre and the Department of Communication Studies, seeks to create more confident, creative, and compelling communicators.

### Minor Requirements

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

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared minor(s) and additional minor(s).

### Presentation Requirements

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 Requirements

Code	Title	Hours
Complete two of the following:		8
THTR 1125	Improvisation	
THTR 1130	Introduction to Acting	
THTR 1160	The Professional Voice	
THTR 2345	Acting for the Camera	

### GPA Requirement

2.000 GPA required in the minor

#### 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	
MUST 2320	Sound Design	



**Interdisciplinary Elective**

Code	Title	Hours
Complete one of the following:		4
ARTG 1250	Design Process Context and Systems	
ARCH 1450	Understanding Design	
ARTG 3462	Experience Design 1	
THTR 1131	Technical Theatre 1	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
MUST 2320	Sound Design	

**GPA Requirement**

2.000 GPA required in the minor

**Theatre, Performance, and Social Change, Minor**

The theatre, performance, and social change minor helps to prepare students for the challenges of world citizenship by developing competencies in theoretical, historical, and contextual knowledge alongside the technical skills to express their understanding of diverse social issues by making narratives, theatre, and performances. The minor's selected courses focus on enlarging students' ability to identify social problems; explore social movements; and make sensitive, ethical, and artistic choices in performance creation. In addition, students are encouraged to think strategically about the material realities of creating performance for social change.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated.

*Note:* No student may receive a theatre minor as a result of external transfer credit only.

**Foundational Courses**

Code	Title	Hours
THTR 1215	Activism and Performance	4
THTR 2340	Theatre and Society	4

**Theatrical Interventions in Social Issues**

Code	Title	Hours
Complete one of the following:		4
THTR 1220	Race, Power, and Performance	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2500	Breaking the Glass Ceiling: Women in Theatre	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
INAM 5100	Performance Studies	

**Community Engagement**

Code	Title	Hours
Complete one of the following:		4
ARTD 5582	Collaborative Video and Community Engagement	
COMM 1412	Social Movement Communication	
HUSV 1101	Social Change and Human Services	
HUSV 3520	Child Intervention and Treatment	
JRNL 5309	News Documentary Production	
JRNL 5310	Photojournalism	
POLS/SOCL/ WMNS 3100	Gender, Social Justice, and Transnational Activism	

**GPA Requirement**

2.00 GPA required in the minor

**Accelerated Bachelor/Graduate Degree Programs**

The College of Arts, Media and Design offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

**D'Amore-McKim School of Business**

Website (<http://www.damore-mckim.neu.edu>)

**Raj Echambadi, PhD**, Dunton Family Dean

**Jeffery A. Born, PhD**, Associate Dean of Undergraduate Programs

**Emery A. Trahan, PhD**, Senior Associate Dean of Faculty and Research

*Undergraduate Office*

250 Dodge Hall

617.373.3270

617.373.4804 (fax)

Northeastern University's D'Amore-McKim School of Business enables students to develop the skills needed to lead in today's technologically driven business world. We deliver a curriculum that combines knowledge in technology and data analytics with uniquely human skills, such as critical thinking, creativity, and an entrepreneurial mindset.

Bringing all of that together is Northeastern's experience-powered approach to education. Students build their own personal brands as they explore a vast array of real-world experiences on their paths to graduation, including global immersion, undergraduate research, service-learning projects, interdisciplinary courses, and our signature co-op program.

Our expert faculty members have a deep understanding of business theory, which they apply to both their research and teaching; many also consult and partner with the corporate world. They're plugged into industry trends and will challenge and inspire you. Dedicated academic advisers and co-op coordinators are on hand every step of the way to help

students make decisions throughout their academic and professional careers.

The school offers Bachelor of Science degrees in:

- Business Administration
- International Business
- Combined Majors—see Combined Majors section

For each degree program students must choose one of the concentrations listed below

- Accounting
- Corporate Innovation and Venture
- Entrepreneurial Startups
- Entrepreneurship and Innovation
- Family Business
- Finance
- Fintech
- Healthcare Management and Consulting
- International Business (available only as a second concentration)
- Management
- Management Information Systems
- Marketing
- Marketing Analytics
- Social Innovation and Entrepreneurship
- Supply Chain Management

The business curriculum is enhanced by courses in the sciences, humanities, and social sciences. In addition to their academic courses, all students are required to complete a cooperative education plan.

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 AACSB International—The Association to Advance Collegiate Schools of Business for faculty and student quality, curriculum design, and overall university support.

After graduation, students may obtain jobs in all aspects of business, both domestically and internationally, as well as in nonprofits and government.

### Academic Progression Standards

In addition to meeting the university progression standards, students must achieve a 2.000 GPA in business courses.

Freshmen must complete at least 32 semester hours (SH) in order to progress to sophomore status. Freshmen who earn fewer than 32 SH must make up the difference prior to graduation. Students beyond the freshman year must complete at least 16 SH each in-school (not on co-op) full semester and 8 SH each in-school summer half semester in order to progress to the next class standing.

Students who do not meet academic progression standards will be placed on academic probation and may be subject to dismissal from the university.

### Pass/Fail Option

D'Amore-McKim School of Business students may opt to take courses on a pass/fail basis in accordance with university policy but should be aware that this policy applies to nonbusiness courses that will count as open electives only. Business courses may not be taken pass/fail under any circumstance.

### Taking Courses While on Co-op

It is D'Amore-McKim School of Business policy that, with permission of their academic adviser, 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 AACSB International—The Association to Advance Collegiate Schools of Business and as such complies with the following regulations governing the transferring of credit:

#### COURSES FROM AN AACSB-ACCREDITED INSTITUTION

Students may transfer a maximum of 80 SH of credit. A combination of 60 SH of nonbusiness courses and/or 28 SH of business courses will be accepted; 64 SH may be applied as credits toward the minimum 128 SH required for degree conferral.

#### COURSES FROM A NON-AACSB-ACCREDITED INSTITUTION

Students may transfer a maximum of 60 SH of credit. A combination of 52 SH of nonbusiness courses and/or 20 SH of business courses will be accepted.

Some courses are not eligible for transfer. Check with the Office of Undergraduate Admissions for more details.

### Graduation Requirements

The school reserves the right to amend programs, courses, and degree requirements to fulfill its educational responsibility to respond to relevant changes in the field.

Bachelor of Science degree candidates must complete all prescribed work of the curriculum in which they seek to qualify, currently 128 SH. The degree not only represents the formal completion of selected courses but also indicates professional study in the major or concentration. A GPA of 2.000 and a C average in all business courses are required for graduation.

### 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, problem-driven 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 four-year 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Differences and Diversity (DD), Creative Expression and Innovation (EI), and Natural and Designed World (ND) are not explicitly satisfied by required courses in the business curriculum at this time. Students are responsible for satisfying these requirements, and if these are not fulfilled in required major courses, they should use general electives to do so.

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Management Information Systems</b>		
MISM 2301	Management Information Systems	4
<b>Operations Management and Supply Chain Management</b>		
SCHM 2301	Supply Chain and Operations Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Statistics</b>		
MGSC 2301	Business Statistics	4

## Concentration

Complete the required concentration appropriate to your program. One concentration is required. A second concentration is optional.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and Innovation (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)

- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

## Macroeconomics and Microeconomics

ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4

## Business Cooperative Education

Complete one cooperative education experience.

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Program Requirement

128 total semester hours required

## Plan of Study

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

Note: Plan of study will vary based upon student's academic program. The four-year plan of study will require summer courses throughout the student's academic career. Individual study plans will be created with an academic advisor.

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1101	4	ECON 1115	4	Elective	4	Elective	4
BUSN 1102	1	Business core	4	ENGW 1111, ECON 1116, or MATH 1231	4	Business Core	4
ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4	ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4				
Take two:	8	Take one:	4				
MGSC 2301 (AD)		MGSC 2301 (AD)					
ACCT 1201		ACCT 1201					

INTB 1203 (IC and ER)	INTB 1203 (IC and ER)					
		17	16	8	8	
<b>Year 2</b>						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Concentration course	4	COOP		COOP		Business Core
Business core	4					ORGB 3201
Elective	4					
NU Path	4					
BUSN 1103	1					
		17	0	0	8	
<b>Year 3</b>						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Concentration Course	4	COOP		COOP		Elective
Elective	4					Elective
NU Path	4					
Business Core	4					
		16	0	0	8	
<b>Year 4</b>						
Fall	Hours	Spring	Hours			
ENGW 3304	4	STRT 4501	4			
Concentration Course	4	Concentration course	4			
NU Path	4	Elective	4			
Elective	4	Elective	4			
		16	16			

Total Hours: 130

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

Note: Plan of study will vary based upon student's academic program. The four-year plan of study will require summer courses throughout the student's academic career. Individual study plans will be created with an academic advisor.

<b>Year 1</b>						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
BUSN 1101	4	ECON 1115	4	Elective	4	Elective
BUSN 1102	1	Business core	4	ENGW 1111, ECON 1116, or MATH 1231	4	Business Core
ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4	ENGW 1111, ECON 1116, or MATH 1231 (FQ)	4			
Take two:	8	Take one:	4			
MGSC 2301 (AD)		MGSC 2301 (AD)				
ACCT 1201		ACCT 1201				

INTB 1203 (IC and ER)	INTB 1203 (IC and ER)					
		17	16	8	8	
<b>Year 2</b>						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Concentration course	4	Concentration course	4	Elective	4	Co-op
Business core	4	Business core	4	NU Path	4	
Business core	4	Elective	4			
NU Path	4	BUSN 1103	1			
		Elective	4			
		16	17	8	0	
<b>Year 3</b>						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	Concentration course	4	NU Path	4	Co-op
		ENGW 3304	4	Elective	4	
		ORGB 3201	4			
		Elective	4			
		0	16	8	0	
<b>Year 4</b>						
Fall	Hours	Spring	Hours			
Co-op	0	STRT 4501	4			
		Concentration course	4			
		Elective	4			
		Elective	4			
		0	16			

Total Hours: 130

### International Business, BSIB

Students who choose the BSIB program have the opportunity to learn how managers function in an evolving globalized economy. To this end, they study the skills and knowledge needed to work across national cultures and differing business practices, both virtually and face-to-face. The curriculum examines how a global environment impacts the student's chosen specific business concentration area: finance, marketing, accounting, entrepreneurship, supply chain management, management information systems, marketing analytics, and healthcare management and consulting, among others.

Knowledge about other cultures and practices is best learned on location and experientially. Accordingly, BSIB students are required to complete at least two semesters of study and/or cooperative education assignments in a country other than the country where they grew up. Also, BSIB students can start their studies with a semester overseas in the NUin program. Additionally, BSIB students are encouraged to become proficient in a second language. Upon graduation, BSIB students are prepared to join companies that are engaged in business internationally. Graduates can work in their home country for a company that operates internationally or overseas on a foreign assignment.

The BSIB program can be completed in four or five years, depending on the program of study. During the optional fifth year, the BSIB program

offers the opportunity to earn a Master of Science in International Management (MIM), Finance (MSF), or Accounting (MSA) through the BSIB PlusOne option (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-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. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Differences and Diversity (DD), Natural and Designed World (ND), and Formal and Quantitative Reasoning (FQ) are not explicitly satisfied by required courses in the business curriculum at this time. Students are responsible for satisfying these requirements, and if these are not fulfilled in required major courses, they should use general electives to do so.

## Business Core

Code	Title	Hours
ACCT 1201	Financial Accounting and Reporting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
MGSC 2301	Business Statistics	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4

## International Business Requirements

Code	Title	Hours
INTB 1202	Becoming a Global Manager	4
INTB 2202	Analyzing the Global Business Environment	4
INTB 3202	Managing the International Assignment	4
INTB 4202	Executing Global Strategy	4

## Concentration

Complete one of the following concentrations. A second concentration is optional. Certain concentrations require additional prerequisites. Please consult your academic advisor to ensure you have met these requirements.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and Innovation (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- Management (p. 291)

- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## General Education

Code	Title	Hours
ECON 1116	Principles of Microeconomics	4
ENGW 1111	First-Year Writing	4
ENGW 3304	Advanced Writing in the Business Administration Professions	4
BUSN 1102	Personal Skill Development for Business	1
BUSN 1103	Professional Development for Business Co-op	1

## Business Cooperative Education

Complete one cooperative education experience.

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Program Requirement

128 total semester hours required

## Plan of Study

### Four-Year Program: Year 3 Abroad with 2 Co-ops

Note: Individual study plans will be created with an academic advisor and may vary based on the student's goals. Plan below is a sample only.

- Additional courses may be required in place of open electives. Electives may be moved or used to fulfill language classes.
- Finance concentration requires Managerial Accounting (ACCT 2301) and Principles of Macroeconomics (ECON 1115) to fulfill prerequisites. Accounting concentration requires Managerial Accounting (ACCT 2301) as a prerequisite. Supply chain management requires Supply Chain and Operations Management (SCHM 2301) as a prerequisite. Management information systems requires Management Information Systems (MISM 2301) as a prerequisite.

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTB 1202	4	ENGW 1111	4	Elective	4	Elective	4
MGSC 2301	4	MKTG 2201	4	FINA 2201	4	Elective	4
ECON 1116 or ENTR 2301	4	INTB 2202	4				
ACCT 1201	4	ECON 1116 or ENTR 2301	4				
BUSN 1102	1						
	17		16		8		8

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTB 3202	4	Co-op	0	Co-op		Elective	4
Elective	4					Elective	4

Concentration course	4				
Elective	4				
BUSN 1103	1				
	17	0	0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Year abroad —school and co-op	0	Co-op abroad		Co-op abroad		Elective	4
Concentration course	4					Elective	4
Elective	4						
Elective	4						
Elective	4						
	16	0	0				8

**Year 4**

Fall	Hours	Spring	Hours
Elective	4	INTB 4202	4
ORGB 3201	4	Concentration Course	4
ENGW 3304	4	Elective	4
Concentration course	4	Elective	4
	16		16

Total Hours: 130

**Exchange Students**

Students who choose the BSIB program learn how managers function in an evolving globalized economy. To this end, they acquire skills and knowledge needed to work across national cultures and differing business practices both virtually and face-to-face. Additionally, they learn how such a global environment impacts their chosen specific business concentration area: finance, marketing, accounting, entrepreneurship, supply chain management, management information systems, marketing analytics, and healthcare management among others.

Degree earning exchange students must successfully complete their first two academic years at their home institution and must take part in a cooperative education assignment before transferring to Northeastern University. The total program of study must meet the BSIB degree requirements as listed in this catalog for DMSB students. Upon graduation, BSIB students are prepared to join companies that are engaged in business internationally. Graduates can work in their home country for a company that operates internationally or overseas on a foreign assignment.

The BSIB program offers the opportunity to earn a Master of Science in International Management (MIM), Finance (MSF), or Accounting (MSA) through the BSIB PlusOne option (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Differences and Diversity (DD), Natural and Designed World (ND), and Formal and Quantitative Reasoning (FQ) are not explicitly satisfied by required courses in the business curriculum at this time. Students are responsible for satisfying these requirements, and if these are not fulfilled in required major courses, they should use general electives to do so.

**Business Core**

Code	Title	Hours
ACCT 1201	Financial Accounting and Reporting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
MGSC 2301	Business Statistics	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4

**International Business Requirements**

Code	Title	Hours
INTB 1202 or INTB 1203	Becoming a Global Manager International Business and Global Social Responsibility	4
INTB 3310	Cultural Aspects of International Business	4
INTB 3320	International Business Management and Environment	4
INTB 4202	Executing Global Strategy	4

**Concentration**

Complete one of the following concentrations. A second concentration is optional. Certain concentrations require additional prerequisites. Please consult your academic advisor to ensure you have met these requirements.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and Innovation (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)



## General Education

Code	Title	Hours
ECON 1116	Principles of Microeconomics	4
ENGW 1111	First-Year Writing	4
ENGW 3304	Advanced Writing in the Business Administration Professions	4
BUSN 1103	Professional Development for Business Co-op	1

## Business Cooperative Education

Complete one cooperative education experience.

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Program Requirement

128 total semester hours required

### Combined Majors

- Business Administration and Communication Studies, BS (p. 172)
- Business Administration and Design, BS (p. 94)
- Business Administration and Psychology, BS (p. 268)
- Computer Science and Business Administration, BS (p. 269)
- Cybersecurity and Business Administration, BS (p. 274)
- Data Science and Business Administration, BS (p. 276)
- Economics and Business Administration, BS (p. 279)
- Health Science and Business Administration, BS (p. 280)
- International Affairs and International Business, BS (<http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/international-affairs/international-affairs-international-business-bs/>)
- Mathematics and Business Administration, BS (p. 282)
- Political Science and Business Administration, BS (p. 284)

### Business Administration and Communication Studies, BS

The combined major between business administration and communication studies provides students with a robust overview of business and communication studies. This combined major seeks to prepare students for career opportunities in growing industry markets such as public relations, marketing communications, and digital media.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Business Core Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or COMM 1000	Communication Studies at Northeastern	
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Business Statistics</b>		
MGSC 2301	Business Statistics	4
<b>Business Core Option 1</b>		
INTB 1203	International Business and Global Social Responsibility	4
or ORGB 3201	Organizational Behavior	
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Business Core Option 2</b>		
ACCT 2301	Managerial Accounting	4
or ENTR 2301	Innovation!	
or MISM 2301	Management Information Systems	
or SCHM 2301	Supply Chain and Operations Management	

## Business Concentration Required

A concentration is required and may be chosen from the following list:

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Supporting Business Courses

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
<b>Macroeconomics and Microeconomics</b>		

Complete one of the following:	4
ECON 1115 Principles of Macroeconomics	
ECON 1116 Principles of Microeconomics	

**Communication Studies Requirements**

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 1113	Business and Professional Speaking	
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following:	4
COMM 1210 Persuasion and Rhetoric	
COMM 1225 Communication Theory	
COMM 1231 Principles of Organizational Communication	
COMM 1255 Communication in a Digital Age	

**Cluster Course**

Complete one of the following:	4
COMM 1131 Sex, Relationships, and Communication	
COMM 2303 Global and Intercultural Communication	
COMM 2304 Communication and Gender	
COMM 2501 Communication Law	
COMM 2551 Free Speech in Cyberspace	

**Writing-Intensive**

Complete two of the following:	8
COMM 3200 Mobile Communication	
COMM 3201 Health Communication	
COMM 3230 Interpersonal Communication	
COMM 3304 Communication and Inclusion	
COMM 3320 Political Communication	
COMM 3414 Great Speakers and Speeches	
COMM 3415 Communication Criticism	
COMM 3445 Public Relations Principles	
COMM 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 additional electives. Choose from any communication studies courses not used to satisfy requirements above or related electives outside of communication studies. 12

ARTF 2220	Movement and Time
ARTD 2360	Introduction to Photography
ARTD 2380	Video Basics
ARTD 3460	Photography: Concept + Process
ARTD 3480	Video: Sound and Image

JRNL 1101	Journalism 1: Fundamentals of Reporting
JRNL 3425	Public Relations Principles
JRNL 3625	Public Relations Practice
JRNL 3610	Digital Storytelling and Social Media
JRNL 5311	Design for Storytelling
JRNL 5314	Video News Reporting and Producing
JRNL 5316	The Newsroom
MSCR 1230	Introduction to Film Production
MSCR 2302	Advertising and Promotional Culture

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
MKTG 4504	Advertising and Brand Promotion	4
<b>Capstone</b>		
Complete one of the following:		4
STRT 4501	Strategy in Action	
COMM 4608	Strategic Communication Capstone	
COMM 4533	Consultation Skills	

**Business GPA Requirement**

Minimum 2.000 GPA in business courses required

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1102 or COMM 1000	1	COMM 1112, 1113, or 2301	4	Communication studies elective	4	Elective	4
ACCT 1201	4	MGSC 2301	4	NUpath course	4	Elective	4
ENGW 1111	4	Communication studies foundation course	4				
COMM 1101	4	MKTG 2201	4				
MATH 1231	4						
	17		16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
FINA 2201	4	COOP 3945	0	COOP 3945	0	Elective	4
BUSN 1103 or EEAM 2000	1					Elective	4
Business core option	4						

Communication studies cluster course	4						
ECON 1115 or 1116	4						
	17		0		0		8
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Business core option 1	4	COOP 3945	0	COOP 3945	0	Communication studies elective	4
MKTG 4504	4					NUpath course	4
Communication studies writing-intensive 1	4						
Concentration course	4						
	16		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Concentration course	4	Concentration course	4				
Communication studies writing-intensive 2	4	COMM 4608, STRT 4501, or COMM 4533	4				
Communication studies elective	4	COMM 3409, ENGW 3304, ENGW 3314, or ENGW 3315	4				
Concentration course	4	Elective	4				
	16		16				

Total Hours: 130

## Business Administration and Design, BS

The combined major in business administration and design integrates fundamental design courses with the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. The BS degree can be accomplished using the five-year co-op plan.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Business Core Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or ARTF 1000	Art and Design at Northeastern	
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1260	Math Fundamentals for Games	
<b>Macroeconomics and Microeconomics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
<b>Business Statistics</b>		
MGSC 2301	Business Statistics	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4
<b>Business Core Option</b>		
Complete one of the following:		4
ACCT 2301	Managerial Accounting	
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	
<b>Professional Development</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EEAM 2000	Professional Development for Co-op	

### Business Concentration

Complete one of the following business concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)

- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

**Second Business Concentration (Optional)**

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

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

**Design Requirements**

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		4-5
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
<b>Design Required</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
ARTG 3350	Typography 2	4
<b>Design Elective</b>		
Complete any one ARTG design elective course, as long as prerequisites have been met.		4
<b>Art History Elective</b>		
Complete any one ARTH course.		4
<b>Art + Design Elective</b>		
Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met.		4

**Degree Capstone Project**

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

Code	Title	Hours
Complete one of the following options:		
<b>Interaction Design Option</b>		
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	
<b>Graphic and Information Design Option</b>		
ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	
<b>Experience Design Option</b>		
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Integrative Course**

Code	Title	Hours
Note: Integrative course is required above.		
ARTG 4550	Design Degree Project 1	

**Business GPA Requirement**

A minimum 2.000 GPA in business courses is required.

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BUSN 1102 or ARTF 1000	1	ECON 1115 or 1116	4	ARTG 2250 (with optional ARTG 2251)	4	Art + Design fundamentals elective	4
ACCT 1201	4	MGSC 2301	4	Elective	4	Elective	4
ARTF 1122 (with optional ARTF 1123)	4	ARTG 1250	4				
Art History Elective	4	Math Elective	4				
ENGW 1111	4						
		17			16		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTB 1203	4	Business concentration introductory course	4	FINA 2201	4	Co-op	0
ARTG 3350	4	Business core option	4	Elective	4		
Design option 1	4	Design option 2	4				

MKTG 2201	4	Art + Design elective	4				
		BUSN 1103 or EEAM 2000	1				
	16		17		8		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	ORGB 3201	4	Business concentration elective course 2	4	Co-op	0
		Business concentration elective course 1	4	Elective	4		
		Design elective	4				
		ENGW 3314 or 3315	4				
	0		16		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op	0	STRT 4501	4				
		ARTG 4550	4				
		Business concentration course	4				
		Elective	4				
	0		16				

Total Hours: 130

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Business Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MISM 2301 or SCHM 2301	Management Information Systems Supply Chain and Operations Management	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4
STRT 4501	Strategy in Action	4

### Supporting Courses for Business

ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	4
MATH 1231	Calculus for Business and Economics	4

### Business Concentration

Complete one of the following concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320 or MGSC 2301	Statistics in Psychological Research Business Statistics	4
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
PSYC 3400	Personality	4
PSYC 3404	Developmental Psychology	4
<b>Required Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	

PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Required Lab**

Complete one of the following: 4

PSYC 4600	Laboratory in Research Design
PSYC 4606	Laboratory in Biological Psychology
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

**Psychology Electives**

Complete two PSYC courses not used to fulfill the requirements above: 8

PSYC 1001 to PSYC 5999

**Supporting Courses**

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or PSYC 1000	Psychology at Northeastern	

**Co-op Preparation**

Complete one of the following: 1

BUSN 1103 Professional Development for Business Co-op  
 or EESC 2000 Professional Development for Co-op

**Integrative Course**

Code	Title	Hours
ORGB 3201	Organizational Behavior	4

**Business GPA Requirement**

A minimum 2.000 GPA in business courses is required.

**Psychology GPA Requirement**

A minimum 2.000 GPA in psychology courses is required.

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Program Requirement**

128 total semester hours required

**Computer Science and Business Administration, BS**

The computer science and business combined major delivers a technical degree with a strong grounding in business. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while also focusing on technical skills like program design, software development, computer organization, systems and networks, theories of computation, principles of languages, and advanced algorithms and data.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
Complete two of the following:		8
CS 3650	Computer Systems	
CS 3700	Networks and Distributed Systems	
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	
DS 4300	Large-Scale Information Storage and Retrieval	
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1

**Khoury Elective**



With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Business Courses

Code	Title	Hours
<b>Required Business Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
ORGB 3201	Organizational Behavior	4
MKTG 2201	Introduction to Marketing	4
MGSC 2301	<i>Business Statistics</i>	4
STRT 4501	Strategy in Action	4

## Business Concentration

Complete a four-course business concentration from the following list.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Integrative Course

Code	Title	Hours
<b>Information Resource Management</b>		
MISM 2301	Management Information Systems	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4

## Computing and Social Issues

Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300	Knowledge in a Digital World
or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Concentrations****CONCENTRATION IN ACCOUNTING**

Code	Title	Hours
<b>Required Courses</b>		
ACCT 3401	Financial Reporting and Analysis 1	4
ACCT 4501	Financial Reporting and Analysis 2	4
<b>Electives</b>		
Complete two of the following:		8
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
ACCT 4412	Auditing and Other Assurance Services	
ACCT 4414	Income Tax Determination and Planning	

**CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION**

Code	Title	Hours
<b>Note:</b> The following courses do not count toward this concentration:		
ENTR 1201	The Entrepreneurial Universe	
ENTR 3308	Business Economic History of South Africa	
ENTR 3338	Field Research in Sustainable Energy in Iceland	
ENTR 4510	Management Consulting Abroad	
ENTR 4514	Development Practice and Global Citizenship in India	

**Introductory Course**

ENTR 2301	Innovation!	4
or ENTR 2303	Marketing Strategies for Startups	

**Capstone Course**

Complete one of the following:		4
ENTR 4501	Advanced Studies in Entrepreneurial Startups	
ENTR 4503	Advanced Studies in Family Business	
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures	
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	

**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 2301	Innovation! (if not used as introductory course)	
ENTR 2303	Marketing Strategies for Startups (if not used for introductory course)	
ENTR 2304	Industry Disruption and Corporate Transformation	

ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 3212	Innovation for Social Change	
ENTR 3217	Global Family Business Leadership	
ENTR 3220	International Entrepreneurship and Innovation Consulting	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 3306	Global Entrepreneurship	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 3335	Product Innovation and Portfolio Management	
ENTR 3401	Consulting Operations Growth in SMEs	
ENTR 3403	Managing Operations in a Technology-Based Startup Firm	
ENTR 3520	Impact Investing and Social Finance	
ENTR 4225	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
<b>Required Course</b>		
FINA 3301	Corporate Finance	4
or FINA 3303	Investments	
<b>Electives</b>		
Complete three of the following:		12
ENTR 3520	Impact Investing and Social Finance	
or FINA 2720	Sustainability in the Business Environment	
FINA 2730	Fintech and Financial Innovation	
FINA 3301	Corporate Finance (if not selected as a required course)	
FINA 3303	Investments (if not selected as a required course)	
FINA 4219	Portfolio Management	
FINA 4220	Behavioral Finance	
FINA 4310	Working Capital Management	
FINA 4312	Issues in Corporate Governance	
FINA 4320	International Financial Management	
FINA 4330	Emerging Financial Markets	
FINA 4340	Blockchain Applications in Finance and Accounting	
FINA 4350	Applied Financial Econometrics	
FINA 4370	Financial Modeling	
FINA 4380	Financial Data Analytics with Python	
FINA 4390	Machine Learning in Finance	
FINA 4410	Valuation and Value Creation	
FINA 4412	Personal Financial Planning	
FINA 4420	Mergers and Acquisitions	
FINA 4512	Financial Risk Management	
FINA 4514	Investment Banking	
FINA 4516	Real Estate Finance	

FINA 4524	Credit Analysis
FINA 4526	Core Topics in Alternative Investments
FINA 4602	Turnaround Management
FINA 4604	Fixed-Income Securities
FINA 4608	Advanced Financial Strategy
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity
FINA 4983	Special Topics in Finance

**CONCENTRATION IN MANAGEMENT**

Code	Title	Hours
<b>Required Course</b>		
MGMT 4550	Management Consulting in Organizations	4

**Electives**

Note: Only one non-MGMT course may be used as an elective.

Complete three of the following: 12

ENTR 2215	Understanding Family Enterprise
ENTR 2414	Social Responsibility of Business in an Age of Inequality
ENTR 4225	Growth, Acquisitions, and Alliances
MGMT 3302	Negotiating in Business
MGMT 3305	Power and Influence
MGMT 3315	Managing Organizational Change and Disruption
MGMT 3340	Healthcare Management, Innovation, and Design
MGMT 3350	Managing a Diverse Workforce
MGMT 3360	Law and the Legal Process
MGMT 3380	Leading with Character
MGMT 3420	Managing Human Capital
MGMT 3435	Social Networks and Organizations
MGMT 3530	Project Management
MGMT 4310	The Management Practices of Great Organizations
MGMT 4410	Workforce Analytics
MGMT 4983	Special Topics in Management

**CONCENTRATION IN MARKETING**

Code	Title	Hours
<b>Required Courses</b>		
MKTG 3401	Marketing Research	4
MKTG 3301	Marketing Management	4
or MKTG 4506	Consumer Behavior	

**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	Managing Customer Engagement in a Service World
MKTG 4504	Advertising and Brand Promotion

MKTG 4506	Consumer Behavior (if not selected as a required course)
MKTG 4508	Digital Marketing
MKTG 4510	New Product Development
MKTG 4512	International Marketing
MKTG 4983	Special Topics in Marketing

**CONCENTRATION IN SUPPLY CHAIN MANAGEMENT**

Code	Title	Hours
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**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 3315	Managing Healthcare Operations and Supply Chain
SCHM 3320	Demand Planning and Forecasting
SCHM 4401	Advanced Problems in Supply Chain Management
SCHM 4983	Special Topics in Supply Chain 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	CS 2510 and CS 2511	5	MATH 1341 or 1231	4	Vacation	
CS 1800 and CS 1802	5	CS 3200	4	ACCT 1201	4		
CS 2500 and CS 2501	5	ECON 1116	4				
ENGW 1111	4	Elective	4				
ECON 1115	4						
		19		17		8	
						0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ACCT 2301	4	Business concentration 1	4	MKTG 2201	4	Co-op	
CS 3500	4	CS 3000	4	Elective	4		
MGSC 2301	4	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	4	FINA 2201	4	Co-op	
		MISM 2301	4	ORGB 3201	4		

Business concentration 2	4			
Khoury Elective	4			
THTR 1170	1			
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours
Co-op	CS 3700	4 STRT 4501	4
	CS 4500	4 ENGW 3302	4
	Business concentration 3	4	
	Business concentration 4	4	
	0	16	8

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ECON 1116	4		
ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	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 concentration 1	4 MKTG 2201	4	
	MISM 2301	4		
	ENGW 3302	4		
	THTR 1170	1		
	0	17	8	0

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 Business concentration 2	4 Elective	4 Co-op	0
	CS 3700	4 Elective	4	

Business concentration 3	4			
Khoury Elective	4			
	0	16	8	0

**Year 5**

Fall	Hours Spring	Hours
Co-op	0 STRT 4501	4
	Business concentration 4	4
	CS 4500	4
	Computing and social issues	4
	0	16

Total Hours: 134

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

**Year 1**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1800 and CS 1802	5 CS 2510 and CS 2511	5 Vacation	0 Vacation	0
CS 2500 and CS 2501	5 CS 3200	4		
CS 1200	1 ECON 1116	4		
ECON 1115	4 Elective	4		
ENGW 1111	4			
	19	17	0	0

**Year 2**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3500	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			
	17	0	0	8

**Year 4**

Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CS 3650	4 Co-op	0 Co-op	0 Elective	4
Business concentration 1	4		Elective	4
MISM 2301	4			

ENGW 3302	4				
	16		0		0
					8
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Khoury Elective	4	STRT 4501	4		
Business concentration 2	4	CS 4500	4		
Business concentration 3	4	Computing and social issues	4		
CS 3700	4	Business concentration 4	4		
	16		16		

Total Hours: 134

## Cybersecurity and Business Administration, BS

The cybersecurity and business combined major delivers a technical and security-focused degree with a strong grounding in business. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while also focusing on the conceptual and practical computer science skills that will enable them to contribute to ensuring the reliability and security of cyberspace.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4

CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
CY 4740	Network Security	4
<b>Cybersecurity Electives</b>		
If courses require prerequisites, those should be taken using general electives.		
Complete one course from the following:		3-4
COMM 2551	Free Speech in Cyberspace	
CRIM 2200	Criminology	
CRIM 3030	Global Criminology	
CRIM 3400	Corporate Security: Securing the Private Sector	
CRIM 4040	Crime Prevention	
CS 2800	Logic and Computation	
CS 4240	Large-Scale Parallel Data Processing	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4710	Mobile and Wireless Systems	
CS 6710	Wireless Network	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
EECE 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	
IS 4300	Human Computer Interaction	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
MATH 3527	Number Theory 1	
MATH 4575	Introduction to Cryptography	
PHIL 1145	Technology and Human Values	
POLS 2390	Science, Technology, and Public Policy	
POLS 3307	Public Policy and Administration	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Business Requirements**

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Statistics</b>		
MGSC 2301	Business Statistics	4
<b>Strategy</b>		
STRT 4501	Strategy in Action	4

**Business Concentration**

Complete a four-course business concentration from the following list. (p. )

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and Innovation (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Integrative Requirement**

Code	Title	Hours
MISM 2301	Management Information Systems	4

**Supporting Courses**

Code	Title	Hours
<b>Mathematics Courses</b>		
Complete one of the following:		4
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
Complete one of the following:		4
ECON 1115	Principles of Macroeconomics	
ECON 1116	Principles of Microeconomics	

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

**Business GPA Requirement**

Minimum 2.000 GPA required in all business courses.

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

**Program Requirement**

133 semester hours required

**Plan of Study**

Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	CY 2550	4	Elective 1	4		
CS 2500 and CS 2501	5	MATH 1341 or 1231	4				
ENGW 1111	4	ACCT 1201	4				



ECON 1115 or 1116	4					
	19	17	8	0		
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 3000	4	CS 3700	4	MKTG 2201	4	Co-op
CS 3650	4	CY 3740	4	Elective 3	4	
ACCT 2301	4	Business concentration 1	4			
MGSC 2301	4	Elective 2	4			
		CS 1210	1			
	16	17	8	0		
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		CY 4170 or 5240	4	FINA 2201	4	Co-op
		Business concentration 2	4	ORGB 3201	4	
		Business concentration 3	4			
		CY 4740	4			
		THTR 1170	1			
	0	17	8	0		
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		ENGW 3302	4	STRT 4501	4	
		MISM 2301	4	Elective 4	4	
		Business concentration 4	4			
		Cybersecurity elective	4			
	0	16	8			

Total Hours: 134

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

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation
CS 1800 and CS 1802	5	CY 2550	4			
CS 2500 and CS 2501	5	MATH 1341 or 1231	4			
ENGW 1111	4	ACCT 1201	4			
ECON 1115 or 1116	4					
	19	17	0	0		
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
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 concentration 1	4			
		Elective 1	4			
	16	17	0	0		
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		CY 3740	4	FINA 2201	4	Co-op
		MKTG 2201	4	ORGB 3201	4	
		THTR 1170	1			
		Business concentration 2	4			
		Elective 2	4			
	0	17	8	0		
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		CY 4170 or 5240	4	ENGW 3302	4	Co-op
		CY 4740	4	Elective 4	4	
		Business concentration 3	4			
		Elective 3				
	0	12	8	0		
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op		MISM 2301	4			
		STRT 4501	4			
		Business concentration 4	4			
		Cybersecurity elective	4			
	0	16				

Total Hours: 130

## Data Science and Business Administration, BS

The data science and business combined major integrates a technical degree with the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. This program reflects the impact of data in modern business practice.

### Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
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### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4

### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Business Courses

Code	Title	Hours
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### Required Business Courses

ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MGSC 2301	Business Statistics	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4

Complete one of the following: 4

ENTR 2301	Innovation!
MISM 2301	Management Information Systems
SCHM 2301	Supply Chain and Operations Management
STRT 4501	Strategy in Action

## Business Concentration

Complete a four-course business concentration from the following list.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Marketing (p. 292)
- Marketing Analytics (p. 293)

*Note: If the Marketing Analytics concentration is selected an additional general elective is required.*

- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Integrative Course

Code	Title	Hours
BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Business GPA Requirement

Minimum 2.000 GPA required in business courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Ethical Reasoning
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	ACCT 2301	4		
CS 2500 and CS 2501	5	MATH 1341	4				
ACCT 1201	4	ECON 1115	4				
ENGW 1111	4						
19		17		8		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MGSC 2301	4	CS 1210	1	MKTG 2201	4	Co-op	0
DS 3000	4	DS 4200	4	Elective	4		
INTB 1203	4	DS 4300	4				
Elective	4	Business concentration 1	4				

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4400	4	FINA 2201	4	Co-op	0
		SCHM 2301	4	ORGB 3201	4		
		Business concentration 2	4				
		Khoury elective	4				
		THTR 1170	1				
16		17		8		0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4900	4	ENGW 3302	4		
		BUSN 5001	4	Elective	4		
		Business concentration 3	4				
		Business concentration 4	4				
0		16		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 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 3200	4				
CS 1200	1	ACCT 1201	4				
ECON 1115	4	Elective	4				
ENGW 1111	4						
19		17		0		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	FINA 2201	4	Vacation	0	Co-op	0
MATH 1341	4	INTB 1203	4				
MGSC 2301	4	DS 3000	4				
ACCT 2301	4	CS 1210	1				
		Elective	4				
16		17		0		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4200	4	ORGB 3201	4	Co-op	0
		DS 4300	4	MKTG 2201	4		
		Business concentration 1	4				
		MISM 2301	4				

	THTR 1170	1					
	0	17		8			0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	Business concentration 2	4	ENGW 3302	4	Co-op	0
		Business concentration 3	4	Elective	4		
		Khoury elective	4				
		Elective	4				
	0	16		8			0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op	0	DS 4900	4				
		SCHM 2301	4				
		BUSN 5001	4				
		Business concentration 4	4				
	0	16					

Total Hours: 134

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
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	
ECON 2560	Applied Econometrics	4

### Economics Electives

Complete 4 courses that are found in the following ranges, with no more than one at the introductory (1000) level: 16

ECON 1200 to ECON 1999
ECON 3000 to ECON 4689
ECON 4900 to ECON 4999
ECON 5200 to ECON 5999

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4

### Business Concentration

Complete one of the following business concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Computer Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	
<b>Capstone Requirement</b>		
ECON 4692	Senior Economics Seminar	4
STRT 4501	Strategy in Action	4

### Economics GPA Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or MGSC 2301	Business Statistics	
ECON 2560	Applied Econometrics	4

### Business GPA Requirement

Minimum 2.000 GPA required in business courses

### Program Requirement

128 total semester hours required

### Plan of Study

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ACCT 1201	4	ECON 1116	4	ECON 2315	4	MKTG 2201	4
ECON 1000 or BUSN 1102	1	MGSC 2301 or ECON 2350	4	NUpath DD	4	FINA 2201	4
ENGW 1111	4	FINA 2201	4				
MATH 1231	4	INTB 1203	4				
ECON 1115	4						
		17	16		8	8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	Co-op		Co-op		Elective	4
ACCT 2301	4					ORGB 3201	4
CS 1100, MISM 2510, or DS 2000 and DS 2001	4						

BUSN 1103 or EESH 2000	1						
Economics Elective 1	4						
		17	0		0	8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2560	4	Co-op		Co-op		Advanced Writing	4
Concentration Course 1	4					Elective	4
Concentration Course 2	4						
Economics Elective 2	4						
		16	0		0	8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Concentration Course 3	4	ECON 4692	4				
Economics Elective 3	4	Concentration Course 4	4				
STRT 4501	4	Economics Elective 4	4				
Elective	4	Elective	4				
		16	16				

Total Hours: 130

## Health Science and Business Administration, BS

The combined major in Health Science and Business Administration provides students at Northeastern with an opportunity to study a curriculum that is synergetic with the growing field of 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	4
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Business Administration Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
<b>Business Electives</b>		
Complete two of the following:		8
MISM 2301	Management Information Systems	
MKTG 2201	Introduction to Marketing	
SCHM 2301	Supply Chain and Operations Management	
ORGB 3201	Organizational Behavior	
<b>Supporting Courses for Business</b>		
Complete one of the following:		4
ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	

## Business Concentration

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. )

- Accounting (p. )
- Corporate Innovation and Venture
- Entrepreneurial Startups

- Entrepreneurship and New Venture Management (p. )
- Family Business
- Finance (p. )
- Fintech
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. )
- Management Information Systems (p. )
- Marketing (p. )
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship
- Supply Chain Management (p. )

## Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
HSCI 1000 or BUSN 1102	College: An Introduction Personal Skill Development for Business	1
<b>Calculus</b>		
MATH 1231 or MATH 1241	Calculus for Business and Economics Calculus 1	4
<b>Statistics</b>		
PHTH 2210 or MGSC 2301	Foundations of Biostatistics Business Statistics	4
<b>Co-op Preparation</b>		
Complete one of the following:		1
BUSN 1103	Professional Development for Business Co-op	
HSCI 2000	Professional Development for Bouvé Co-op	
<b>Writing</b>		
ENGW 1111	First-Year Writing	4
ENGW 3306 or ENGW 3304	Advanced Writing in the Health Professions Advanced Writing in the Business Administration Professions	4
<b>Capstone</b>		
Complete one of the following:		4
STRT 4501	Strategy in Action	
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
<b>Integrative Requirement</b>		
Code	Title	Hours
MGMT 3340	Healthcare Management, Innovation, and Design	4

## Required General Electives

Code	Title	Hours
Complete at least 16 credits of general electives		16

## Business GPA Requirement

A minimum 2.000 GPA is required in all business courses.



## Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

## Program Requirement

133 total semester hours required

## Plan of Study

### Sample Plan of Study

#### Year 1

Fall	Hours	Spring	Hours
HSCI 1000 or BUSN 1102	1	BIOL 1113 and BIOL 1114	5
PHTH 1260	4	ENGW 1111	4
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
BIOL 1111 and BIOL 1112	5	Elective	4
MATH 1241 or 1231	4		
	18		18

#### Year 2

Fall	Hours	Spring	Hours	Summer 2	Hours
PHTH 2210 or MGSC 2301	4	HSCI 2000 or BUSN 1103	1	Co-op	
PHTH 2350	4	PHTH 2300	4		
ECON 1115 or 1116	4	PHTH 2515	4		
ACCT 1201	4	FINA 2201	4		
		INTB 1203	4		
	16		17		0

#### Year 3

Fall	Hours	Spring	Hours
Co-op		HLTH 5450 or PHTH 4202	4
		Elective or Concentration Course	4
		ACCT 2301	4
		Business Core Selective #1	4
	0		16

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 3306 or 3304	4	Co-op		Co-op	
PHTH 4540	4				
MGMT 3340	4				

Business Core Selective #2	4		
	16	0	0

#### Year 5

Fall	Hours	Spring	Hours
PHTH 4120	4	HSCI 4720, 4730, or STRT 4501	4
HSCI 4700	0	Electives or Concentration Courses	12
Electives or Concentration Courses	12		
	16		16

Total Hours: 133

## 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Mathematics Requirements

Code	Title	Hours
<b>Required Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 3081	Probability and Statistics	4
<b>Calculus and Linear Algebra (Required) and Differential Equations (Recommended)</b>		
Complete either Option 1 or Option 2 below:		8
<i>Option 1 (Recommended)</i>		

MATH 2321	Calculus 3 for Science and Engineering
MATH 2341	Differential Equations and Linear Algebra for Engineering

*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	1
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**Mathematics Electives**

Complete three courses in the range MATH 3001 to MATH 5999. The following courses are recommended:

MATH 4681	Probability and Risks	12
MATH 4682	Theory of Interest and Basics of Life Insurance	
MATH 4581	Statistics and Stochastic Processes	

**Business Requirements**

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4

**Integrative Course**

Note: Financial Risk Management (FINA 4512) also counts toward the finance concentration.

Code	Title	Hours
FINA 4512	Financial Risk Management	4

**Finance Concentration**

Code	Title	Hours
<b>Finance Requirements</b>		
FINA 3301	Corporate Finance	4
FINA 3303	Investments	4
FINA 4512	Financial Risk Management	4
<b>Finance Elective</b>		
Complete one of the following: 4		
ENTR 3520 or FINA 2720	Impact Investing and Social Finance 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 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.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

**Supplemental Courses**

Code	Title	Hours
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
<b>Co-op Preparation</b>		
BUSN 1103 or EESC 2000	Professional Development for Business Co-op Professional Development for Co-op	1

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Mathematics GPA Requirement**

Minimum 2.000 GPA required in all mathematics courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**Program Requirement**

128 total semester hours required

## Political Science and Business Administration, BS

The combined major in political science and business administration offers students the opportunity to integrate the study of politics and government with an analysis of business practices and organizations. Students complete core courses in political science along with core courses in business administration that cover accounting, finance, marketing, and organizational behavior. This combined major highlights the important intersection between business practices and the evolution of politics and government.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Introduction to College</b>		
POLS 1000 or BUSN 1102	Political Science at Northeastern Personal Skill Development for Business	1
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2330	American Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Statistics</b>		
POLS 2400 or MGSC 2301	Quantitative Techniques Business Statistics	4
<b>Political Science Electives</b>		
Complete two courses in the following range, or complete a political science concentration as outlined below:		8
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 285)
- Campaigns and Elections (p. 285)
- Comparative Politics (p. 285)
- Identity, Culture, and Politics (p. 285)
- International Relations and Diplomacy (p. 285)
- Law and Legal Studies (p. 285)
- Public Policy (p. 286)
- Security Studies (p. 286)

### Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4

### Business Concentration

Complete one of the following business concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231 or MATH 1341	Calculus for Business and Economics Calculus 1 for Science and Engineering	4
<b>Economics</b>		
ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	4
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Co-op Preparation</b>		
BUSN 1103 or EESH 2000	Professional Development for Business Co-op Professional Development for Co-op	1

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone</b>		
POLS 4701	Political Science Senior Capstone (or POLS 4703 Senior Thesis)	4
or STRT 4501	Strategy in Action	

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Political Science GPA Requirement**

Minimum 2.000 GPA required in all political science courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**Program Requirement**

128 total semester hours required

**Political Science Concentrations (Optional)****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	

POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	

POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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:		
POLS 3408	International Security	16
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1000 or BUSN 1102	1	POLS 1150	4	DD NUPath	4	Open Elective	4
POLS 1155	4	POLS 1160	4	Open Elective	4	Open Elective	4
ENGW 1111	4	MGSC 2301 or POLS 2400	4				
ACCT 1201	4	ECON 1115 or 1116	4				
MATH 1231	4						
BUSN 1103 or EESH 2000	1						
	18		16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS Thought	4	Co-op	4	Co-op	4	FINA 2201	4

POLS elective	4			ACCT 2301	4
MKTG 2201	4				
CS 1100	4				
CS 1101	1				
	17		0	0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op	4	Co-op	4	POLS elective	4
POLS elective	4					ND NUPath	4
ORGB 3201	4						
Concentration Class 1	4						
	16		0	0			8

Year 4			
Fall	Hours	Spring	Hours
Concentration 2	4	POLS 4701 or STRT 4501	4
ENGW 3304, 3315, or 3307	4	Concentration 4	4
Concentration 3	4	IC NUPath	4
EI NUPath	4	ER NUPath	4
	16		16

Total Hours: 131

**Concentrations**

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and Innovation (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Global Business and Strategy (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

**Accounting**

404 Hayden Hall  
617.373.3240  
617.373.8814 (fax)

Ganesh Krishnamoorthy, Professor and Group Chair,

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 advisory services and emerging accounting systems. Students wishing to sit for the CPA exam may combine the BSBA with a concentration in accounting with the Master of Science in Accounting (five-year BSBA/MSA program).

## Concentration Requirements

### CONCENTRATION IN ACCOUNTING

Code	Title	Hours
<b>Required Courses</b>		
ACCT 3401	Financial Reporting and Analysis 1	4
ACCT 4501	Financial Reporting and Analysis 2	4
<b>Electives</b>		
Complete two of the following:		8
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
ACCT 4412	Auditing and Other Assurance Services	
ACCT 4414	Income Tax Determination and Planning	

## Corporate Innovation and Venture

Corporate innovation is a series of processes by which established companies promote, design, and pursue innovation opportunities that can result in new products, services, and/or business models. It entails R&D activities, product development, internal venture accelerators, acquisitions, and alliances. Innovation is the most powerful competitive weapon for a corporation that wants to ensure growth and relevance over time.

The corporate innovation and venture concentration is designed to prepare students to develop new businesses, products, services, or processes inside of an existing organization to create value and generate new revenue growth through entrepreneurial thought and action. A concentration in corporate innovation and venture will develop students to be agents of change and renewal within established companies, aspiring to leading roles in areas such as product development, new business research, and innovation-related projects. This concentration targets students with co-op aspirations that involve positions within corporations such as entry-level product line management, project management, consulting, and new product and service development.

## Concentration Requirements

### CONCENTRATION IN CORPORATE INNOVATION AND VENTURE

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4504	Advanced Studies in Corporate Innovation	4
<b>Electives</b>		
Complete two electives, one of which may come from the additional elective list:		8
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 3335	Product Innovation and Portfolio Management	
ENTR 4225	Growth, Acquisitions, and Alliances	
<i>Additional Electives</i>		
ENTR 2206	Global Social Enterprise	
ENTR 2215	Understanding Family Enterprise	
ENTR 2303	Marketing Strategies for Startups	
ENTR 4983	Special Topics in Entrepreneurship	
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures	
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity	
MGMT 3302	Negotiating in Business	
MGMT 3340	Healthcare Management, Innovation, and Design	
MGMT 3530	Project Management	
STRT 4301	Strategic Analysis and Decision Making	
One course from an approved Dialogue may count toward a concentration elective.		

## Entrepreneurial Startups

A startup is a young company founded by one or more entrepreneurs in order to develop a product or service and bring it to market. Startups can be technology-intensive with novel products or use existing technologies to create new variations or combinations. The entrepreneurial startups concentration is designed to prepare students from any background or area of study with the perspective, knowledge, and skills necessary to conceptualize, launch, manage, and grow a new business. It will also equip them with an understanding of the advantages and challenges of a startup they may work for. Students have an opportunity to learn to shape entrepreneurial opportunities, assess feasibility, raise funds, and develop other skills needed to open, manage, and grow a new business venture. Students are exposed to innovation, marketing, and business modeling as they work in interdisciplinary teams to develop business plans. This concentration seeks students with career aspirations that involve starting a new venture or working in a startup.

## Concentration Requirements

### CONCENTRATION IN ENTREPRENEURIAL STARTUPS

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4501	Advanced Studies in Entrepreneurial Startups	4
<b>Electives</b>		



Complete two electives, one of which may come from the Additional Electives list: 8

ENTR 2303	Marketing Strategies for Startups
ENTR 3305	Business Model Innovation for Entrepreneurs
ENTR 3330	Lean Design and Rapid Prototyping
<i>Additional Electives</i>	
ENTR 2206	Global Social Enterprise
ENTR 2215	Understanding Family Enterprise
ENTR 2304	Industry Disruption and Corporate Transformation
ENTR 4983	Special Topics in Entrepreneurship
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity
MGMT 3302	Negotiating in Business

One course from an approved Dialogue may count toward an elective.

## 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 Chair, Academic Programs, [t.marion@northeastern.edu](mailto:t.marion@northeastern.edu)

Fernando F. Suarez, Jean C. Tempel Professor, Entrepreneurship and Innovation; Entrepreneurship and Innovation Group Chair, Research and Tenure-Track Faculty, [f.suarez@northeastern.edu](mailto:f.suarez@northeastern.edu)

The Business Concentration in Entrepreneurship and Innovation 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. Students who pursue the Business Concentration in Entrepreneurship and Innovation are able to also complement their studies with an off-campus program in San Francisco. 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 San Francisco and 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.

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

ENTR 1201	The Entrepreneurial Universe	
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ENTR 3308	Business Economic History of South Africa	
ENTR 3338	Field Research in Sustainable Energy in Iceland	
ENTR 4510	Management Consulting Abroad	
ENTR 4514	Development Practice and Global Citizenship in India	

#### Introductory Course

ENTR 2301 or ENTR 2303	Innovation! Marketing Strategies for Startups	4
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#### Capstone Course

Complete one of the following:		4
ENTR 4501	Advanced Studies in Entrepreneurial Startups	
ENTR 4503	Advanced Studies in Family Business	
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures	
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	

#### 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 2301	Innovation! (if not used as introductory course)	
ENTR 2303	Marketing Strategies for Startups (if not used for introductory course)	
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 3212	Innovation for Social Change	
ENTR 3217	Global Family Business Leadership	
ENTR 3220	International Entrepreneurship and Innovation Consulting	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 3306	Global Entrepreneurship	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 3335	Product Innovation and Portfolio Management	
ENTR 3401	Consulting Operations Growth in SMEs	
ENTR 3403	Managing Operations in a Technology-Based Startup Firm	
ENTR 3520	Impact Investing and Social Finance	
ENTR 4225	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	

## Family Business

A family business is a commercial organization owned or controlled by members of a single family or extended family, including relatives related by blood, marriage, or adoption. Family controlled companies are a dominant form of enterprise worldwide. Due to the inextricable link between family and the business, family firms must grapple with unique challenges in that the business decisions are often intertwined with family dynamics, as in the case of succession planning and corporate governance. The purpose of this concentration is to provide insight and understanding of the distinct challenges, opportunities, and practices of family/owner-controlled companies.

The concentration covers family and business issues of family firms, including family values and culture, managing conflict, sibling rivalry, entitlement, hiring family and nonfamily employees, management of the family business, facilitating growth and change, and succession planning. This concentration is intended for those contemplating a career in a family business and for those who plan to consult or provide professional services to family businesses. It will present both a theoretical framework for understanding the family form of business and a practical perspective on working for, or consulting to, a family/owner-controlled business.

### Concentration Requirements

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4503	Advanced Studies in Family Business	4
<b>Electives</b>		
Complete two electives, one of which may come from the Additional Elective list:		8
ENTR 2215	Understanding Family Enterprise	
ENTR 3302	Managing and Growing the Family Business	
ENTR 3401	Consulting Operations Growth in SMEs	
<i>Additional Electives</i>		
ENTR 2206	Global Social Enterprise	
ENTR 2303	Marketing Strategies for Startups	
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 4983	Special Topics in Entrepreneurship	
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity	
MGMT 3302	Negotiating in Business	

Students may use one course from an approved Dialogue experience toward the elective area of the concentration.

## Finance

Website (<http://www.damore-mckim.neu.edu>)

413 Hayden Hall  
617.373.3616  
617.373.8798 (fax)  
Olubunmi Faleye, Professor and Group Chair, 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	Title	Hours
<b>Required Course</b>		
FINA 3301 or FINA 3303	Corporate Finance Investments	4
<b>Electives</b>		
Complete three of the following:		12
ENTR 3520 or FINA 2720	Impact Investing and Social Finance Sustainability in the Business Environment	
FINA 2730	Fintech and Financial Innovation	
FINA 3301	Corporate Finance (if not selected as a required course)	
FINA 3303	Investments (if not selected as a required course)	
FINA 4219	Portfolio Management	
FINA 4220	Behavioral Finance	
FINA 4310	Working Capital Management	
FINA 4312	Issues in Corporate Governance	
FINA 4320	International Financial Management	
FINA 4330	Emerging Financial Markets	
FINA 4340	Blockchain Applications in Finance and Accounting	
FINA 4350	Applied Financial Econometrics	
FINA 4370	Financial Modeling	
FINA 4380	Financial Data Analytics with Python	
FINA 4390	Machine Learning in Finance	
FINA 4410	Valuation and Value Creation	
FINA 4412	Personal Financial Planning	
FINA 4420	Mergers and Acquisitions	
FINA 4512	Financial Risk Management	
FINA 4514	Investment Banking	
FINA 4516	Real Estate Finance	
FINA 4524	Credit Analysis	
FINA 4526	Core Topics in Alternative Investments	
FINA 4602	Turnaround Management	
FINA 4604	Fixed-Income Securities	

FINA 4608	Advanced Financial Strategy
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity
FINA 4983	Special Topics in Finance

## Fintech

This concentration is designed for students who are interested in learning about new applications of technology in financial services, under the general heading of Fintech (financial technology). In addition to mastering the foundations of finance, successful students in this concentration will learn how to leverage technology to create and improve financial services. The concentration provides both a broad and in-depth view of various Fintech topics (e.g., big data, machine learning, peer-to-peer lending, blockchain, digital currencies, algorithmic trading) and allows students to develop programming skills in R and Python. These tools and knowledge are especially valued by banks, consulting firms, financial technology, and investment firms.

### Concentration Requirements

#### CONCENTRATION IN FINTECH

Only one course may be double counted with another concentration.

Code	Title	Hours
<b>Required Courses</b>		
FINA 3303 or FINA 3301	Investments Corporate Finance	4
FINA 4380	Financial Data Analytics with Python	4
<b>Electives</b>		
Complete two of the following:		8
FINA 2730	Fintech and Financial Innovation	
FINA 4340	Blockchain Applications in Finance and Accounting	
FINA 4350	Applied Financial Econometrics	
FINA 4390	Machine Learning in Finance	

## Global Business and Strategy

### Concentration Requirements

#### CONCENTRATION IN GLOBAL BUSINESS AND STRATEGY

Code	Title	Hours
<b>Required Courses</b>		
INTB 1202	Becoming a Global Manager	4
INTB 2202	Analyzing the Global Business Environment	4
INTB 4202	Executing Global Strategy	4
<b>Elective</b>		
Complete one of the following:		4
INTB 3310	Cultural Aspects of International Business	
FINA 4320	International Financial Management	
MKTG 4512	International Marketing	
SCHM 3301	Global Supply Chain Strategy	

## Healthcare Management and Consulting

Healthcare is an exciting and important industry, growing faster than any other, and its importance to society cannot be underestimated given its focus on helping people live longer and lead happier, higher-quality lives. Working in healthcare requires knowledge and skills in several cutting-edge areas such as service delivery innovation, process and quality improvement, talent management, analytics, and supply chain management. The concentration in healthcare management and consulting offers students an opportunity to understand how this major sector of the U.S. economy works; to apply training in other areas like finance and marketing to managing healthcare problems and opportunities; to obtain a viable educational and career outlet for realizing their interests in advancing the social good; and to prepare for working, managing, and consulting in the healthcare industry. The concentration in healthcare management and consulting is an interdisciplinary concentration that provides exposure to several different areas of business and the social sciences important for working in healthcare.

### Concentration Requirements

#### CONCENTRATION IN HEALTHCARE MANAGEMENT AND CONSULTING

*Note:* Students may double count up to one course in another business concentration.

Code	Title	Hours
<b>Required Courses</b>		
MGMT 3340	Healthcare Management, Innovation, and Design	4
SCHM 3315	Managing Healthcare Operations and Supply Chain	4
<b>Implementation/Consulting Elective</b>		
Complete one of the following:		4
BUSN 3110	The Consulting Environment	
ENTR 3220	International Entrepreneurship and Innovation Consulting	
MGMT 3302	Negotiating in Business	
MISM 3501	Information Visualization for Business	
MISM 3515	Data Mining for Business	
MGMT 3315	Managing Organizational Change and Disruption	
MGMT 3530	Project Management	
MGMT 3420	Managing Human Capital	
MGMT 4410	Workforce Analytics	
MGMT 4550	Management Consulting in Organizations	
<b>Interdisciplinary Healthcare Focus</b>		
Complete one of the following:		4
COMM 3201	Health Communication	
COMM 4533	Consultation Skills	
HUSV 2970	Research Methods for Human Services	
IE 3500	Introduction to Healthcare Systems Engineering	
PHTH 2515	Healthcare Policy and Administration	
PHTH 4515	Critical Issues in Health and Public-Health Policy	

SOCL 3440	Sociology of Human Service Organizations
SOCL 3441	Sociology of Health and Illness

## International Business

The concentration in international business is designed for students interested in developing their knowledge and skills related to doing business in the global economy. The development of a deeper understanding of international business will be crucial in the future. Subject matter covered in this concentration focuses on topics such as the cultural, economic, technological, and political aspects of varying national business environments and their impact on international business operations. Students are exposed to a variety of key international business concepts ranging from strategic planning in the global arena to managing behavior and interpersonal relations. Additional topics include international trade theory, national trade policies, foreign market analysis, managing technological issues, and international strategic management.

From a job placement perspective, few firms today operate or compete exclusively in domestic markets. Possessing a knowledge of how people, firms, and institutions interact across borders provides international business concentrators with a competitive edge. This concentration pairs well with other D'Amore-McKim concentrations such as finance, marketing, and supply chain, among others.

### Concentration Requirements

#### CONCENTRATION IN INTERNATIONAL BUSINESS

Note: Students may double count up to one course in another business concentration.

Code	Title	Hours
<b>Required Courses</b>		
INTB 1203	International Business and Global Social Responsibility	4
or INTB 1209	International Business and Global Social Responsibility	
Complete one or both of the following:		4-8
INTB 2501	Competing to Win in Emerging Markets	
INTB 3310	Cultural Aspects of International Business	

#### Electives

Complete two of the following courses (one if both courses above selected). 4-8

Note: One course can also count toward a different business concentration.

##### *Managing Internationally*

INTB 3202	Managing the International Assignment
INTB 3320	International Business Management and Environment
INTB 4202	Executing Global Strategy

##### *International Functional Knowledge*

ENTR 2206	Global Social Enterprise
ENTR 3306	Global Entrepreneurship
FINA 4320	International Financial Management
MKTG 4512	International Marketing
SCHM 3301	Global Supply Chain Strategy

##### *Contextual Experience*

ENTR 4512	Social Entrepreneurship and Sustainable Development in India
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Electives not listed may be approved via the undergraduate dean's office.

## Management

Website (<http://www.damore-mckim.neu.edu>)

112 Hayden Hall  
 617.373.2452  
 617.373.2491 (fax)  
 Cynthia Lee, Professor and Group Chair, [c.lee@northeastern.edu](mailto: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, such as business analytics, human resources, client and sales support, and project management. Many students who concentrate in management decide to get a second concentration, giving them the ability to work in teams and manage other people in whatever arena they find themselves.

### Concentration Requirements

#### CONCENTRATION IN MANAGEMENT

Code	Title	Hours
<b>Required Course</b>		
MGMT 4550	Management Consulting in Organizations	4

#### Electives

Note: Only one non-MGMT course may be used as an elective.

Complete three of the following: 12		
ENTR 2215	Understanding Family Enterprise	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 4225	Growth, Acquisitions, and Alliances	
MGMT 3302	Negotiating in Business	
MGMT 3305	Power and Influence	
MGMT 3315	Managing Organizational Change and Disruption	
MGMT 3340	Healthcare Management, Innovation, and Design	
MGMT 3350	Managing a Diverse Workforce	
MGMT 3360	Law and the Legal Process	
MGMT 3380	Leading with Character	
MGMT 3420	Managing Human Capital	
MGMT 3435	Social Networks and Organizations	
MGMT 3530	Project Management	
MGMT 4310	The Management Practices of Great Organizations	

MGMT 4410	Workforce Analytics
MGMT 4983	Special Topics in Management

## Management Information Systems

214 Hayden Hall  
617.373.3132  
617.373.3166 (fax)

Yang W. Lee, Associate Professor and  
Group Chair, [y.lee@northeastern.edu](mailto:y.lee@northeastern.edu) ([http://  
catalog.northeastern.edu/about:blank](http://catalog.northeastern.edu/about:blank))

In the global information age, success for organizations requires the ability to manage, analyze, and use information effectively. To that end, the goal of the Management Information Systems concentration is to teach future managers how to manage and utilize data and information technology (IT) to help both individuals and organizations perform more efficiently and effectively. This can lead the student in two career directions:

- To become a professional in the cross-functional information management, business analytics, and data quality and governance functions of a company or in an IT or data-enabled strategic business transformation initiative.
- To accelerate and enhance a data-informed or data leadership career in organizations or another functional area such as finance, marketing, research and development, innovation, accounting, workforce management, strategic management, or acquisitions.

Understanding how to get the right information in the right form and format to the right people at the right time is essential in today's business world, especially when companies and the individuals that do this well are achieving significant competitive advantages. Students have the opportunity to explore new, cutting-edge approaches that allow them to use the powerful resource of information to its greatest advantage. These approaches often use analytical concepts such as information visualization, artificial intelligence, and data mining. The importance of information privacy and security is also emphasized. Students have the opportunity to develop technical and problem-solving skills that are in high demand by employers, and to apply those skills through both classroom activities and co-ops focused on information management or business analytics.

Managers in the information management function need to interact frequently with other managers throughout an organization. Therefore, students are encouraged to complete a dual concentration in information management and another area of business. Graduates of this program have a wide range of career paths that suit their particular interests. Professional options include Business/Systems/Information Analyst, Database Manager or Designer, Data Architect or Data Strategist, Information Product Designer/Manager, Data Quality Manager, Data Governance Manager, IT or Data Project Manager, Consultant, and IT or Data Specialist or Strategist within other departments, such as financial services, accounting, marketing, R&D, manufacturing, customer service, and risk management and compliance. Executive positions include Chief Data Officer or Chief Information Officer.

## Concentration Requirements

### CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS

Code	Title	Hours
Only one course may double count between another concentration or minor.		
<b>Required Courses</b>		
MISM 3403	Data Management in the Enterprise	4
<b>Electives</b>		
Complete three of the following:		12
MISM 2510	Fundamentals of Information Analytics	
MISM 3501	Information Visualization for Business	
MISM 3515	Data Mining for Business	
MISM 4501	Business Systems Integration	
MISM 4983	Special Topics in Management Information Systems	
BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy	

## Marketing

Website (<http://www.damore-mckim.neu.edu>)

202 Hayden Hall  
617.373.5307

Felicia Lassk, Associate Professor, Marketing; Marketing Group  
Chair, [f.lassk@northeastern.edu](mailto:f.lassk@northeastern.edu)

Aspiring marketers at the D'Amore-McKim School of Business have an opportunity to learn how brands, customers, and organizations impact business performance and society by embracing an approach that is analytical, creative, and practice oriented. Students receive instruction from award-winning research and teaching faculty who share their knowledge to help empower the next generation of marketing leaders.

The concentration in marketing encourages students to examine marketing as a driver of business growth, while considering the ethical and sustainable practices that are necessary for business and societal benefit.

The building blocks of the marketing concentration require courses in marketing research and consumer behavior or marketing management. This leads to a tailored set of electives to suit different student goals and interests. Students choose from marketing and society, marketing analytics, sales management, managing customer engagement in a service world, advertising and brand promotion, digital marketing, new product development, international marketing, and marketing in Asia to complete their concentration.

Successful graduates from the marketing discipline are equipped with the knowledge and skills to pursue a broad range of professional settings including, but not limited to, digital marketing manager, social media marketer, marketing analyst, data analyst, marketing consultant, UX designer, content strategist, consumer insights analyst, sales manager, and product and brand manager.

Other marketing-related options available to students include a minor in marketing analytics, and combined degrees in business administration (marketing) which include Bachelor of Science in Business Administration (marketing) and Design; Bachelor of Science in Business Administration (marketing) and Communication Studies and Bachelor of



Science in Business Administration (marketing) and Psychology, among others available.

### Concentration Requirements

#### CONCENTRATION IN MARKETING

Code	Title	Hours
<b>Required Courses</b>		
MKTG 3401	Marketing Research	4
MKTG 3301 or MKTG 4506	Marketing Management Consumer Behavior	4
<b>Electives</b>		
Complete two of the following:		8
MKTG 2301	Marketing and Society	
MKTG 3301	Marketing Management (if not selected as a required course)	
MKTG 3501	Marketing Analytics	
MKTG 4220	Marketing in Asia	
MKTG 4420	Sales Management	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4504	Advertising and Brand Promotion	
MKTG 4506	Consumer Behavior (if not selected as a required course)	
MKTG 4508	Digital Marketing	
MKTG 4510	New Product Development	
MKTG 4512	International Marketing	
MKTG 4983	Special Topics in Marketing	

#### Marketing Analytics

Marketing analytics comprises the data-driven methods, techniques, and technologies that enable marketers to evaluate the success of their marketing initiatives and campaigns. This concentration offers the opportunity to learn the cutting-edge skills necessary to harness, process, and analyze data to address modern marketing challenges. It combines data science, consumer analysis, marketing management, and predictive modeling into an integrated curriculum that is designed to prepare students for successful careers in marketing analytics and other data-driven business specializations.

### Concentration Requirements

#### CONCENTRATION IN MARKETING ANALYTICS

Note: Students may double count up to one course in another business concentration.

Code	Title	Hours
<b>Required Courses</b>		
MKTG 3301 or MKTG 4506	Marketing Management Consumer Behavior	4
MKTG 3401	Marketing Research	4
MKTG 3501	Marketing Analytics	4
<b>Elective</b>		
Complete one of the following:		4-5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
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#### Social Innovation and Entrepreneurship

Social entrepreneurship involves creating new products, services, or programs to address social or environmental needs. The Business Concentration in Social Innovation and Entrepreneurship is designed to prepare students from any background or area of study with the knowledge, skills, and experience to launch a new venture or project focused on creating social change through business, partner or work with innovation-driven nonprofit and for-profit social enterprises, work for a business in any industry with an emerging strategic commitment to positive social impact, work in the social finance and impact-investing sectors within the financial services industry, and create and lead intrapreneurial ventures and projects in any business or industry that evidence a commitment to the “stakeholder” model of business.

These five areas fall within the rapidly growing segments of the global economy in which social returns are elevated alongside financial returns in order to create a more equitable and inclusive society. Students will consider ethical and social issues in creating, building, managing, and growing small, medium, and large businesses. The concentration includes a structured community engagement and service requirement, either through participation in international fieldwork (Dialogues, Alternative Spring Break, or other embedded travel programs) and/or local community service programs. Students will have the opportunity to develop specific skill sets in entrepreneurial thinking and critical analysis, creative problem solving, professional communications (writing and presentations), working in diverse and multicultural teams, and interdisciplinary research and data analysis.

### Concentration Requirements

#### CONCENTRATION IN SOCIAL INNOVATION AND ENTREPRENEURSHIP

Code	Title	Hours
<b>Required Courses</b>		
ENTR 2301	Innovation!	4
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	4
<b>Electives</b>		
Complete two of the following, one of which may come from the additional elective list:		8
ENTR 2206	Global Social Enterprise	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 3520	Impact Investing and Social Finance	
<i>Additional Electives</i>		
ENTR 2215	Understanding Family Enterprise	
ENTR 2303	Marketing Strategies for Startups	
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 4983	Special Topics in Entrepreneurship	
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity	
MGMT 3302	Negotiating in Business	
MKTG 2301	Marketing and Society	

One course from an approved Dialogue may count toward an elective.



## Supply Chain Management

214 Hayden Hall  
617.373.3132  
617.373.3166 (fax)  
Yang W. Lee, Associate Professor and Group  
Chair, 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 procurement of supplies and/or services, demand planning and forecasting, inventory policies, order fulfillment, transportation of company's materials and products, warehouse and distribution operations, location of facilities, managing interfirm relationships, and customer service. As companies become increasingly involved in global markets as both buyers and sellers, supply chain managers play a major role not only in assessing the feasibility of international activity but also in developing supply and distribution networks to support that involvement. Because supply chain managers frequently interact with those involved in other areas of management, many supply chain management students have chosen to complete a second concentration in such areas as marketing, management information systems, finance, or entrepreneurship.

There are many career options for supply chain management students. In addition to finding career opportunities with manufacturers, retailers, and distributors, supply chain management students may find similar opportunities with companies that sell supply chain services; consulting firms; financial institutions; healthcare firms; and government agencies at the federal, state, and local levels.

### Concentration Requirements

#### CONCENTRATION IN SUPPLY CHAIN MANAGEMENT

Code	Title	Hours
<b>Required Courses</b>		
SCHM 3301	Global Supply Chain Strategy	4
SCHM 3305	Sourcing and Procurement	4
SCHM 3310	Logistics and Transportation Management	4
<b>Elective</b>		
Complete one of the following:		4
SCHM 3308	Supply Chain Analytics	
SCHM 3315	Managing Healthcare Operations and Supply Chain	
SCHM 3320	Demand Planning and Forecasting	
SCHM 4401	Advanced Problems in Supply Chain Management	
SCHM 4983	Special Topics in Supply Chain Management	

### Minors

Students who wish to enter one of the minor programs listed below should complete the online minor form accessible via the D'Amore-McKim School of Business Undergraduate Programs website. Students who complete all required courses successfully and have earned at least a C (2.000) average in them will be awarded the minor at graduation.

- Business Administration (p. 294)
- Business Analytics (p. 295)
- Consulting (p. 295)
- Corporate Innovation and Venture (p. 296)
- Emerging Markets (p. 296)
- Entrepreneurial Startups (p. 297)
- Family Business (p. 297)
- Leadership and Human Capital (p. 298)
- Marketing (p. 298)
- Marketing Analytics (p. 299)
- Social Innovation and Entrepreneurship (p. 299)
- Strategy (p. 299)
- Sustainable Business Practices (p. 300)

## Business Administration, Minor

The minor in business administration introduces nonbusiness students to the key functional areas in business, providing a broad overview of the business world. The minor is available to nonbusiness students only.

### Minor Requirements

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

#### Accounting

Code	Title	Hours
ACCT 1209	Financial Accounting and Reporting	4

#### Organizational Behavior

Code	Title	Hours
ORGB 3209	Organizational Behavior	4

#### Finance

Code	Title	Hours
FINA 2209	Financial Management (ACCT 1209 is a prerequisite)	4

#### Marketing

Code	Title	Hours
MKTG 2209	Introduction to Marketing	4

#### Business Elective

Code	Title	Hours
Complete one of the following courses or, with the approval of the undergraduate dean's office, any business course for which the prerequisites have been met:		4

BUSN 1110	Fundamentals of Business	
ENTR 1201	The Entrepreneurial Universe	
ENTR 2206	Global Social Enterprise	
ENTR 2215	Understanding Family Enterprise	
ENTR 2301	Innovation!	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
FINA 1209	Personal Finance	
FINA 2720	Sustainability in the Business Environment	

INTB 1209	International Business and Global Social Responsibility
INTB 2501	Competing to Win in Emerging Markets

PHIL 2050	Information and Uncertainty
SCHM 3308	Supply Chain Analytics

### GPA Requirement

2.000 GPA required in the minor

### 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, and offers analytics courses from a business decision-making perspective. The goal of these courses is to help students develop data-driven insights into business problems and solutions, along with the skills to communicate these insights effectively across the organization. The courses include both foundational courses, those geared toward more specific data analytics challenges, and those that apply analytical techniques to specific functional areas. Business analytics courses are grounded in relevant theory and principles and explore real-world problems and data. The courses explore analytics techniques and topics such as information visualization, artificial intelligence, machine learning, and data mining. Course tools are selected based on their effectiveness, usefulness, and their widespread use by employers. Depending on the courses chosen, students can develop skills using packages and languages such as R, Python, SQL, and Tableau. Students have the opportunity to develop technical and problem-solving skills that are in high demand by many types of organizations. The business analytics minor can fit well with any business concentration, as well as majors across other colleges and schools.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Only one course in the minor may double count with another minor or business concentration.

#### Required Course

Code	Title	Hours
MISM 2510	Fundamentals of Information Analytics	4

#### Electives

Code	Title	Hours
Complete three of the following:		12

Note: Only one non-MISM course may be used as an elective.

BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy
ECON 2560	Applied Econometrics
EECE 2300	Computational Methods for Data Analytics
FINA 4380	Financial Data Analytics with Python
JRNL 3610	Digital Storytelling and Social Media
MGMT 4410	Workforce Analytics
MISM 3403	Data Management in the Enterprise
MISM 3501	Information Visualization for Business
MISM 3515	Data Mining for Business
MISM 3525	Modeling for Business Analytics
MISM 4983	Special Topics in Management Information Systems
MKTG 3501	Marketing Analytics

## Consulting, Minor

This minor is designed to provide students with a solid foundation in the skills and concepts needed to succeed in a consulting-oriented environment, as well as an introduction to a variety of possible contexts for consulting work. Consulting skills are essential work skills for many roles beyond the traditional management consultant. Many technical positions within firms demand that consultative skills be used within the firm even in early career positions (e.g., business analyst); in this respect, a consulting minor complements students' technical training. Required courses cover the fundamentals of both management and strategy consulting, as well as a framework of consulting activities that can be applied to many types of consulting and consultative roles. Electives provide students an opportunity to gain deeper knowledge in a specific consulting skill and to explore a context in which they could apply their consulting knowledge.

### Program Requirements

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

Students may only double-count one course in the minor toward their major, concentration, or another minor.

### Required Courses

Code	Title	Hours
MGMT 4550	Management Consulting in Organizations	4
or MGMT 3520	Consulting Fundamentals and Frameworks	
BUSN 3110	The Consulting Environment	4

### Electives

Code	Title	Hours
<b>Consulting Skills</b>		
Complete one of the following:		4
COMM 4533	Consultation Skills	
ENTR 3220	International Entrepreneurship and Innovation Consulting	
ENTR 3330	Lean Design and Rapid Prototyping	
MGMT 3302	Negotiating in Business	
MGMT 3305	Power and Influence	
MGMT 3315	Managing Organizational Change and Disruption	
MGMT 3530	Project Management	
MGMT 4410	Workforce Analytics	

### Consulting Contexts

Complete one of the following:		4
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
CS 3200	Database Design	

CY 2550	Foundations of Cybersecurity
DS 3000	Foundations of Data Science
EMGT 5220	Engineering Project Management
ENTR 3401	Consulting Operations Growth in SMEs
ENTR 4510	Management Consulting Abroad
FINA 4420	Mergers and Acquisitions
FINA 4514	Investment Banking
FINA 4602	Turnaround Management
IE 3500	Introduction to Healthcare Systems Engineering
IE 4525	Logistics and Supply Chain Management
IE 4625	Facilities Planning and Material Handling
IE 5400	Healthcare Systems Modeling and Analysis
IE 5640	Data Mining for Engineering Applications
INTB 2501	Competing to Win in Emerging Markets
MGMT 3340	Healthcare Management, Innovation, and Design
MGMT 3420	Managing Human Capital
MGMT 4310	The Management Practices of Great Organizations
MKTG 3301	Marketing Management
MKTG 4506	Consumer Behavior
PHMD 5575	Pharmaceutical Industry
POLS 2340	Business and Government
STRT 4301	Strategic Analysis and Decision Making

### GPA Requirement

2.000 GPA required in the minor

### Corporate Innovation and Venture, Minor

Corporate innovation is a series of processes by which established companies promote, design, and pursue innovation opportunities that can result in new products, services, and/or business models. It entails R&D activities, product development, internal venture accelerators, acquisitions, and alliances. Innovation is the most powerful competitive weapon for a corporation that wants to ensure growth and relevance over time.

The corporate innovation and venture minor is designed to prepare students to develop new businesses, products, services, or processes inside of an existing organization to create value and generate new revenue growth through entrepreneurial thought and action. A minor in corporate innovation seeks to prepare students to be agents of change and renewal within established companies, aspiring to leading roles in areas such as product development, new business research, and innovation-related projects. This minor targets students with co-op aspirations that involve positions within corporations such as entry-level product line management, project management, consulting, and new product and service development.

### Program Requirements

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

where specified. The minor is not available to DMSB students or students pursuing a combined major with DMSB.

### Required Course

Code	Title	Hours
ENTR 2301	Innovation!	4

### Electives

Code	Title	Hours
Complete three courses, one of which may be chosen from the additional elective option list:		12

ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 3335	Product Innovation and Portfolio Management	
ENTR 4504	Advanced Studies in Corporate Innovation	
ENTR 4225	Growth, Acquisitions, and Alliances	
<i>Additional Electives</i>		
ARTG 1250	Design Process Context and Systems	
ARTG 3462	Experience Design 1	
CS 4500	Software Development	
CS 4520	Mobile Application Development	
CS 4550	Web Development	
ENTR 1201	The Entrepreneurial Universe	
GAME 2010	The Business of Games	
GE 1110	Engineering Design	
GE 5100	Product Development for Engineers	

### GPA Requirement

2.000 GPA required in the minor

### Emerging Markets, Minor

Emerging markets, such as Brazil, China, India, and Turkey, account for 85 percent of the world's population, half its GDP, and more than two-thirds of world economic growth. Understanding how to leverage the consumer needs, talent, and innovation potential of these economies will be vital for the future success of all for-profit and not-for-profit organizations. The minor combines course work on the economic, political, and business challenges of operating in emerging markets with a hands-on, immersive field study component. This interdisciplinary minor is open to business and nonbusiness students.

### Minor Requirements

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

### Emerging Markets

Code	Title	Hours
INTB 2501	Competing to Win in Emerging Markets	4

## Field Study

Code	Title	Hours
	Field study (two courses required) approved by the D'Amore-McKim undergraduate dean's office. Please contact the D'Amore-McKim Academic Advising office to confirm option(s).	8

## Electives

Code	Title	Hours
Complete two of the following:		8
AFRS 1101	Introduction to African Studies	
ANTH 2305	Global Markets and Local Culture	
ASNS 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
or HIST 1500	Modern Chinese History and Culture	
CLTR 1505	Latin American Culture, History, and Politics	
COMM 2303	Global and Intercultural Communication	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 3405	International Political Economy	
POLS 3487	Politics of Developing Nations	
INTB 3310	Cultural Aspects of International Business	

## GPA Requirement

2.000 GPA required in the minor

### Entrepreneurial Startups, Minor

This interdisciplinary minor guides students through the startup process. The Minor in Entrepreneurial Startups is designed to prepare students from any background or area of study to conceptualize, launch, manage, and grow a new business. Students have an opportunity to learn to shape entrepreneurial opportunities; assess feasibility; and develop other skills needed to conceptualize, launch, manage, and grow a new business venture. Students are exposed to innovation, marketing, and business modeling as they work in interdisciplinary teams to develop business plans. Courses from the College of Arts, Media and Design; College of Engineering; and the Houry College of Computer Sciences have been carefully selected to allow students to apply the same course to both his or her own college degree and the entrepreneurial startups minor.

## Program Requirements

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

### Required Course

Code	Title	Hours
ENTR 2301	Innovation!	4

## Electives

Code	Title	Hours
Complete three courses, one of which may be chosen from the additional elective option list:		12
ENTR 2303	Marketing Strategies for Startups (if not chosen above)	

ENTR 3305	Business Model Innovation for Entrepreneurs
ENTR 3330	Lean Design and Rapid Prototyping
ENTR 4501	Advanced Studies in Entrepreneurial Startups

### Additional Elective Options

One of the following courses may fulfill an elective:

ARTG 1250	Design Process Context and Systems
ARTG 3462	Experience Design 1
CS 4500	Software Development
CS 4520	Mobile Application Development
CS 4550	Web Development
ENTR 1201	The Entrepreneurial Universe
GAME 2010	The Business of Games
GE 1110	Engineering Design (Engineering Students Only)
GE 5100	Product Development for Engineers (Engineering Students Only)

## GPA Requirement

2.000 GPA required in the minor

### Family Business, Minor

A family business is a commercial organization owned or controlled by members of a single family or extended family, including relatives related by blood, marriage, or adoption. Family controlled companies are a dominant form of enterprise worldwide. Due to the inextricable link between family and the business, family firms must grapple with unique challenges in that the business decisions are often intertwined with family dynamics, as in the case of succession planning and corporate governance. The purpose of this minor is to provide insight and understanding of the distinct challenges, opportunities, and practices of family/owner-controlled companies.

The minor covers family and business issues of family firms, including family values and culture, managing conflict, sibling rivalry, entitlement, hiring family and nonfamily employees, management of the family business, facilitating growth and change, and succession planning. This minor is intended for those contemplating a career in a family business and for those who plan to consult or provide professional services to family businesses. It will present both a theoretical framework for understanding the family form of business and a practical perspective on working for, or consulting to, a family/owner-controlled business.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. This minor is not open to DMSB students or students pursuing a combined major with DMSB.

### Required Course

Code	Title	Hours
ENTR 2301	Innovation!	4

## Electives

Code	Title	Hours
Complete three courses, one of which may be chosen from the additional elective option list:		12
ENTR 2215	Understanding Family Enterprise	

ENTR 3302	Managing and Growing the Family Business
ENTR 3401	Consulting Operations Growth in SMEs
ENTR 4503	Advanced Studies in Family Business
<i>Additional Electives</i>	
ARTG 1250	Design Process Context and Systems
ARTG 3462	Experience Design 1
CS 4500	Software Development
CS 4520	Mobile Application Development
CS 4550	Web Development
ENTR 1201	The Entrepreneurial Universe
GAME 2010	The Business of Games
GE 1110	Engineering Design (Engineering Students Only)
GE 5100	Product Development for Engineers (Engineering Students Only)

### GPA Requirement

2.000 GPA required in the minor

### Leadership and Human Capital, Minor

The leadership and human capital minor will deepen students' knowledge and skills that are necessary to attract, retain, develop, lead, and manage employees. Employees of a firm are resources for an employer and based on their expertise provide economic value to a firm. Thus, the effective leadership and management of human capital is instrumental to an organization's success. As organizations are seeking new ways of dealing with problems such as globalization, a weak economy, rapidly changing technology, union-management relations, and changing demographics in the workplace, managers and human resources professionals use a wide range of techniques for handling these and other challenges and ensuring that their employees and organizations are competitive and high performing.

Managing human capital is a significant component of the strategic management of an organization. The courses offered in the leadership and human capital minor will expose students to the major issues and challenges in leading and managing a global and increasingly diverse workforce. The courses address the human capital issues all employees face and offer ways to deal with them.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Please note, only one course in the minor may double count in one of the seven business concentrations.

### Organizational Behavior

Code	Title	Hours
ORGB 3201 or ORGB 3209	Organizational Behavior	4

### Managing Human Capital

Code	Title	Hours
MGMT 3420	Managing Human Capital	4

### Electives

Code	Title	Hours
Complete two of the following courses:		8
MGMT 3302	Negotiating in Business	
MGMT 3305	Power and Influence	
MGMT 3315	Managing Organizational Change and Disruption	
MGMT 3350	Managing a Diverse Workforce	
MGMT 3380	Leading with Character	
MGMT 4310	The Management Practices of Great Organizations	
MGMT 4410	Workforce Analytics	

### GPA Requirement

2.000 GPA required in the minor

### Marketing, Minor

The marketing minor is aimed at non-D'Amore-McKim students who wish to complement their current studies with a focus on marketing. In the marketing minor, students can select among courses that explore topics such as consumer behavior, advertising, services marketing, marketing analytics, and international marketing. Pursuing a marketing minor offers Northeastern students an opportunity to gain a deeper appreciation of consumers, markets, metrics, and brands to help them become better business practitioners no matter where their careers take them.

### Minor Requirements

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

*Note:* Students in D'Amore-McKim or in a combined program with D'Amore McKim are not allowed to take this minor.

### Required Courses

Code	Title	Hours
MKTG 2201 or MKTG 2209	Introduction to Marketing	4

### Electives

Code	Title	Hours
Complete three of the following:		12
MKTG 2301	Marketing and Society	
MKTG 3301	Marketing Management	
MKTG 3401	Marketing Research	
MKTG 3501	Marketing Analytics	
MKTG 4220	Marketing in Asia	
MKTG 4420	Sales Management	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4504	Advertising and Brand Promotion	
MKTG 4506	Consumer Behavior	
MKTG 4508	Digital Marketing	
MKTG 4510	New Product Development	
MKTG 4512	International Marketing	



## GPA Requirement

Minimum 2.000 GPA required in all courses completed

### Marketing Analytics, Minor

Marketing analytics comprises the data-driven methods, techniques, and technologies that enable marketers to evaluate the success of their marketing initiatives and campaigns. This minor, aimed at non-D'Amore-McKim students, offers the opportunity to learn the cutting-edge skills necessary to harness, process, and analyze data to address modern marketing challenges. It combines data science, consumer analysis, marketing management, and predictive modeling into an integrated curriculum that seeks to prepare students for successful careers in marketing analytics and other data-driven business specializations.

## Minor Requirements

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

*Note:* Students in D'Amore-McKim or in a combined program with D'Amore-McKim are not allowed to take this minor.

## Required Courses

Code	Title	Hours
MKTG 2201	Introduction to Marketing	4
or MKTG 2209	Introduction to Marketing	
MKTG 3401	Marketing Research	4
MKTG 3501	Marketing Analytics	4
Complete one of the following:		4-5
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	

## GPA Requirement

Minimum 2.000 GPA required in all completed courses

### Social Innovation and Entrepreneurship, Minor

This five-course interdisciplinary Minor in Social Innovation and Entrepreneurship is administered by the D'Amore-McKim School of Business through its Entrepreneurship and Innovation Group in collaboration with the College of Social Sciences and Humanities (CSSH).

The minor consists of four on-campus courses and one course from a two-course Dialogue of Civilizations program. The minor is open to business and nonbusiness students. Several of the courses included in this minor may also apply to other programs or individual course requirements. Because this minor is interdisciplinary, a student may apply only three courses from any one college toward completion of the minor.

Finally, note that business students can pursue this minor or alternatively choose to pursue the Social Innovation and Entrepreneurship concentration, which requires four ENTR courses in social entrepreneurship and does not require a Dialogue.

## Program Requirements

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

*Note:* No more than three courses may be taken from any one college.

## Required Courses

Code	Title	Hours
ENTR 2206	Global Social Enterprise	4
Approved course from Dialogue of Civilizations or another approved program.		4
Noncredit community service required if approved Dialogue is not completed.		

## Electives

Code	Title	Hours
Complete one of the following:		4
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 3520	Impact Investing and Social Finance	
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	
Complete two of the following:		8
ANTH 2305	Global Markets and Local Culture	
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	
INTL 1101	Globalization and International Affairs	
INTL 3400	International Conflict and Negotiation	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 3406	International Law	
POLS 3487	Politics of Developing Nations	

## GPA Requirement

2.000 GPA required in the minor

### Strategy, Minor

The strategy minor is open to undergraduate business students with any major or concentration. The curriculum develops students' ability to assume the role of a general manager and to think constructively about the strategic focus and direction of an organization, as well as its relative competitive strengths and weaknesses. Broad topics include the appropriate criteria and processes for general management decision making, especially under conditions of uncertainty; strategies a firm can follow in order to gain competitive advantage when entering into, competing within, and exiting from individual markets and how these strategies interact when the firm competes in several markets; and the optimal boundaries of the firm—the advantages and disadvantages its unique history and resources give it. The strategy minor may be of particular interest for students who plan to pursue careers in general management, management consulting, new venture management, venture capital, corporate planning, and investment banking.

## Program Requirements

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



**Required Courses**

Code	Title	Hours
STRT 4501 or INTB 4202	Strategy in Action Executing Global Strategy	4

**Electives**

Code	Title	Hours
Complete three of the following:		12
ENTR 4225	Growth, Acquisitions, and Alliances	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
FINA 4420	Mergers and Acquisitions	
INTB 2501	Competing to Win in Emerging Markets	
MKTG 3301	Marketing Management	
MGMT 4310	The Management Practices of Great Organizations	
MGMT 4550 or BUSN 3110	Management Consulting in Organizations The Consulting Environment	
SCHM 4401	Advanced Problems in Supply Chain Management	
STRT 4301	Strategic Analysis and Decision Making	

**GPA Requirement**

2.000 GPA required in the minor

**Sustainable Business Practices, Minor**

Combining course work and a summer field project, the minor in sustainable business practices seeks to provide students with a deeper understanding of sustainability issues and the tools to address these issues in a business environment. This interdisciplinary minor is open to business and nonbusiness students.

**Minor Requirements**

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

*Note:* No more than three courses may be taken from any one college.

**Sustainability in Business**

Code	Title	Hours
FINA 2720	Sustainability in the Business Environment	4

**Field Study**

Code	Title	Hours
Field Study may vary in credit		6-8
ENTR 3336 and ENTR 3338	Resource Management and Renewable Energy in Iceland and Field Research in Sustainable Energy in Iceland	

*Note:* Additional field study courses may be accepted with approval from the undergraduate dean's office.

**Electives**

Code	Title	Hours
Complete two of the following:		8
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
ENVR 1101	Environmental Science	
ENVR 1112	Environmental Geology	
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
GE 1201	Alternative Energy Technologies Abroad	
PHIL 1180	Environmental Ethics	
PHYS 1132	Energy, Environment, and Society	
POLS 2395	Environmental Politics and Policy	
SOCL 1246	Environment and Society	

**GPA Requirement**

2.000 GPA required in the minor

**Accelerated Bachelor/Graduate Degree Programs**

The D'Amore-McKim School of Business offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

**Khoury College of Computer Sciences**

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

**Carla E. Brodley, PhD**, Dean

**Ben Hescott, PhD**, Teaching Professor, Associate Dean of Students

**Alan Mislove, PhD**, Associate Professor, Associate Dean of Undergraduate Programs

**Karyn Rosen, MEd**, Assistant Dean of Undergraduate Academic Advising and Experiential Learning

**Byron Wallace, PhD**, Assistant Professor, Director of Data Science Program

**Christo Wilson, PhD**, Associate Professor, Director of Cybersecurity Program

202 West Village H

617.373.2462

[khoury-advising@northeastern.edu](mailto:khoury-advising@northeastern.edu)

Computing has transformed the way people work and live, and its applications are limitless. Today, an understanding of computing is critical in business, healthcare, science, digital art, and other areas of our information-driven society. Computing knowledge and computing technology also contribute to resolving major issues in an increasingly complex world.

The Khoury College of Computer Sciences offers undergraduate programs that combine a strong foundation in computing with the

opportunity to acquire a deep knowledge of another discipline in which computing plays a critical role. The college offers undergraduate degree programs in computer science (BS and BA), data science (BS), and cybersecurity (BS) and over 25 combined majors with partner departments in six other Northeastern colleges, allowing students to engage in intense study in two disciplines. The Bachelor of Science in Computer Science emphasizes strong technical competence in computer science, mathematics, science, and electrical engineering. The Bachelor of Arts in Computer Science combines computer science with a broad-based liberal arts education. The Bachelor of Science in Data Science combines computer science, information science, mathematics, statistics, and probability theory into an integrated curriculum. The Bachelor of Science in Cybersecurity provides the fundamental knowledge of computer science with an essential focus on experiential learning through security-related courses.

### Academic Progression Standards

In addition to meeting university progression standards, it is expected that full-time Khoury students enroll in four courses with appropriate labs and recitations and successfully complete at least 12 semester hours each academic semester with an acceptable grade-point average (GPA) as noted below. Any exceptions to the course load requirement must be approved by the student's academic adviser prior to the start of each semester. Pass/fail courses are restricted to electives outside of the major, minor, and NUPath requirements.

#### GPA Requirements for Graduation

A minimum cumulative GPA requirement of 2.000 in major (CS/CY/DS/IS) courses and a minimum cumulative GPA requirement of 2.000 overall are required for graduation.

#### Criteria for Academic Probation

Full-time students in Khoury College of Computer Sciences will be placed on academic probation effective for the following academic semester for any of the reasons noted below:

- Not earning at least 12 semester hours in each academic full-term semester (fall, spring)
- Not following a program of study approved by the student's academic adviser

#### First-Year Students

- Not maintaining an overall cumulative GPA of at least 1.800 at the end of each full-term semester (fall, spring) of the first-year curriculum and a GPA of at least 2.000 in the major at the end of the second academic full-term semester of the curriculum (spring)

#### Upperclass and Transfer Students

- Not maintaining an overall cumulative GPA of at least 2.000 and a GPA of at least 2.000 in the major at the end of the second academic full-term semester of the curriculum completed on campus (fall or spring) and at the end of each full-term academic semester thereafter (fall, spring)

#### Academic Dismissal from Major

Not maintaining a GPA of at least 2.000 in the major at the end of the third academic full-term semester and at the end of each full-term academic semester (fall, spring) thereafter will result in dismissal from Khoury College of Computer Sciences.

Students not following a program of study approved by the student's academic adviser for more than one semester may be dismissed from Khoury College of Computer Sciences.

Students dismissed from their major but who are otherwise eligible to remain an active student within the university may continue within Khoury College of Computer Sciences as a transitional major for one semester.

#### Academic Dismissal from University

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

### Program Length

The Khoury College of Computer Sciences prides itself on flexibility and a very supportive advising staff. Depending upon the number of entry-level/transfer credits, the academic program, and student planning, it is possible to complete the program within four years with at least one experiential experience and usually with two such experiences.

## Computer Science

Computer science involves the application of theoretical concepts in the context of software development to the solution of problems that arise in almost every human endeavor. Computer science as a discipline draws its inspiration from mathematics, logic, science, and engineering. From these roots, computer science has fashioned paradigms for program structures, algorithms, data representations, efficient use of computational resources, robustness and security, and communication within computers and across networks. The ability to frame problems, select computational models, design program structures, and develop efficient algorithms is as important in computer science as software implementation skill. Computer science is concerned with bringing together all of the intellectual resources needed to enable the rapid and effective development of software to meet the needs of business, research, and end users.

The goal of the undergraduate program in computer science is to teach students the conceptual and practical skills that will enable them to contribute to the development of computational principles and to play a productive role in the software community. To that end, the undergraduate program focuses on the fundamentals of program design including object-oriented design, software development, computer organization, systems and networks, theory of computation, principles of languages, and advanced algorithms and data. The program also offers a variety of electives at the upper undergraduate and beginning graduate levels ranging from more theoretical courses to those that focus on important applications.

### Programs

#### Bachelor of Science in Computer Science (BSCS)

- Computer Science (p. 302)

#### Bachelor of Arts in Computer Science (BACS)

- Computer Science (p. 305)

#### Minor

- Computer Science (p. 308)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Computer Science, BSCS

The Bachelor of Science in Computer Science focuses on the fundamentals of program design, software development, computer organization, systems and networks, theories of computation, principles of languages, and advanced algorithms and data.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2810	Mathematics of Data Models	4
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3800	Theory of Computation	4
CS 4500	Software Development	4
<b>Security Required Course</b>		
Complete one of the following:		4
CY 2550	Foundations of Cybersecurity	
CY 3740	Systems Security	
CY 4740	Network Security	
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		8

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Computer Science Concentrations

Pick one of the following concentrations and complete four courses in that concentration. In all concentrations, up to one Research (CS 4991) course can be substituted with advisor approval. Any missing prerequisites or NUpath requirements must be taken using computer science or general electives. In particular, students must arrange to take a NUpath capstone using either a course in the concentration or a CS, CY, DS, or IS course taken as a computer science elective or as a general elective.

#### CONCENTRATION: ARTIFICIAL INTELLIGENCE

Code	Title	Hours
CS 4100	Artificial Intelligence	4
DS 4400	Machine Learning and Data Mining 1	4
Complete two of the following courses not already taken:		8
CS 4120	Natural Language Processing	
CS 4150	Game Artificial Intelligence	
CS 4610	Robotic Science and Systems	
IS 4200	Information Retrieval	
DS 4420	Machine Learning and Data Mining 2	
PSYC 3466	Cognition	

#### CONCENTRATION: FOUNDATIONS

Code	Title	Hours
Complete two of the following:		
CS 2800 and CS 2801 or CS 4820	Logic and Computation and Lab for CS 2800 and Computer-Aided Reasoning	4-5
CS 4805 or CS 4810	Advanced Theory of Computation and Advanced Algorithms	4
Complete two of the following courses not already taken:		8
CS 4805	Advanced Theory of Computation	
CS 4810	Advanced Algorithms	
CS 4820	Computer-Aided Reasoning	
CS 4830	System Specification, Verification, and Synthesis	
CS 3950 and CS 4950 and CS 4950	Introduction to Computer Science Research and Computer Science Research Seminar and Computer Science Research Seminar	
CY 4770	Cryptography	

#### CONCENTRATION: HUMAN-CENTERED COMPUTING

Code	Title	Hours
IS 4300	Human Computer Interaction	4
IS 4800	Empirical Research Methods	4
Complete two of the following courses not already taken:		8
IS 2000	Principles of Information Science	
IS 4700	Social Information Systems	
CS 4120	Natural Language Processing	
CS 4520	Mobile Application Development	

CS 4550	Web Development	
DS 4200	Information Presentation and Visualization	

\*The concentration in human-centered computing requires a fall co-op pattern.

### CONCENTRATION: SOFTWARE

Code	Title	Hours
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3700	Networks and Distributed Systems	4
CS 4400	Programming Languages	4
Complete one of the following courses not already taken:		
CS 3520	Programming in C++	
CS 3620	Building Extensible Systems	
CS 4240	Large-Scale Parallel Data Processing	
CS 4410	Compilers	
CS 4550	Web Development	
CS 4520	Mobile Application Development	
CS 4820	Computer-Aided Reasoning	

### CONCENTRATION: SYSTEMS

Code	Title	Hours
CS 3700	Networks and Distributed Systems	4
Complete one of the following courses not already taken:		
CY 3740	Systems Security	
CY 4740	Network Security	
Complete two of the following courses not already taken:		
CS 3520	Programming in C++	
CS 4300	Computer Graphics	
CY 3740	Systems Security	
CS 4610	Robotic Science and Systems	
CS 4710	Mobile and Wireless Systems	
CS 4650	High Performance Computing	
CY 4740	Network Security	

### Supporting Courses

Code	Title	Hours
<b>Mathematics Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering (a grade of C– or higher is required)	4
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Computing and Social Issues</b>		
Complete one of the following:		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	

SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Electrical Engineering

EECE 2160	Embedded Design: Enabling Robotics	4
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### Science Requirement

Complete two courses for one of the following science categories:	8
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#### Biology

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
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Then complete one of the following:

BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
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BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	
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#### Chemistry

CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
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CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	
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#### Geology/Environmental Science (Option 1)

ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
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ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History	
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#### Geology/Environmental Science (Option 2)

ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
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Then complete one of the following:

ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
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ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
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ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
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ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
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#### Geology/Environmental Science (Option 3)

ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History	
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ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242	
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#### Mathematics

MATH 1342	Calculus 2 for Science and Engineering	
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MATH 2331	Linear Algebra	
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MATH 3081	Probability and Statistics	
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#### Physics

Complete one of the following sequences:

Sequence A

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
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Sequence B

PHYS 1151 Physics for Engineering 1  
and PHYS 1152 and Lab for PHYS 1151  
and PHYS 1153 and Interactive Learning Seminar for  
PHYS 1151

PHYS 1155 Physics for Engineering 2  
and PHYS 1156 and Lab for PHYS 1155  
and PHYS 1157 and Interactive Learning Seminar for  
PHYS 1155

Sequence C

PHYS 1161 Physics 1  
and PHYS 1162 and Lab for PHYS 1161  
and PHYS 1163 and Recitation for PHYS 1161

PHYS 1165 Physics 2  
and PHYS 1166 and Lab for PHYS 1165  
and PHYS 1167 and Recitation for PHYS 1165

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
	Complete 32 credits of general electives.	32

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Computer Science Credit Requirements

Complete 60 semester hours in the major.

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

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

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4
		MATH 1341	4		4

CS 1800 and CS 1802	5	CS 2810	4	Elective	4	CS 3000	4
CS 2500 and CS 2501	5	Science elective with lab	5				
MATH 1365	4	Elective	4				
ENGW 1111	4						
	19		18		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3650	4	Co-op		Co-op		Elective	4
EECE 2160	4					Elective	4
Concentration course	4						
Elective	4						
CS 1210	1						
	17		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3800	4	Co-op		Co-op		ENGW 3302	4
THTR 1170	1					Elective	4
Concentration course	4						
Elective	4						
Computing and social issues	4						
	17		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
CS 4500	4	Concentration course	4
Khoury elective	4	Khoury elective	4
Concentration course	4	Security course	4
Science elective with lab	5	Elective	4
	17		16

Total Hours: 136

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 2810	4				
CS 2500 and CS 2501	5	Science elective with lab	5				
MATH 1365	4	Elective	4				
ENGW 1111	4						
	19		18		0		0



Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	Co-op	0	Co-op	0	Vacation	0
MATH 1341	4						
CS 3000	4						
Elective	4						
CS 1210	1						
	17		0		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3800	4	Co-op	0	Co-op	0	Elective	4
CS 3650	4					Elective	4
Science elective with lab	5						
Concentration course	4						
THTR 1170	1						
	18		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Concentration course	4	Co-op	0	Co-op	0	ENGW 3302	4
Concentration course	4					Elective	4
Elective	4						
Elective	4						
	16		0		0		8
Year 5							
Fall	Hours	Spring	Hours				
EECE 2160	4	CS 4500	4				
Khoury elective	4	Computing and social issues	4				
Khoury elective	4	Security course	4				
Concentration course	4	Elective	4				
	16		16				

Total Hours: 136

## Computer Science, BACS

The Bachelor of Arts in Computer Science offers a similar curriculum to the BS, with slightly fewer CS requirements to allow students to study a foreign language and have a wider choice of electives.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Requirements for BA

All BA students are required to complete the BA requirements (p. 45).

### Computer Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

#### Computer Science Fundamental Courses

A grade of C- or higher is required in all computer science fundamental courses except CS 1802:

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2810	Mathematics of Data Models	4

#### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3800	Theory of Computation	4
CS 4500	Software Development	4

#### Security Required Course

Complete one of the following:		4
CY 2550	Foundations of Cybersecurity	
CY 3740	Systems Security	
CY 4740	Network Security	

#### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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#### Khoury Elective Courses

With adviser approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Computer Science Concentrations

Pick one of the following concentrations and complete four courses in that concentration.major. In all concentrations, up to one Research (CS 4991) course can be substituted with adviser approval. Any missing prerequisites or NUpath requirements must be taken using computer science or general electives. In particular, students must arrange to take a NUpath capstone using either a course in the concentration or a CS,



CY, DS, or IS course taken as a computer science elective or as a general elective.

### CONCENTRATION: ARTIFICIAL INTELLIGENCE

Code	Title	Hours
CS 4100	Artificial Intelligence	4
DS 4400	Machine Learning and Data Mining 1	4
Complete two of the following classes not already taken:		8
CS 4120	Natural Language Processing	
CS 4150	Game Artificial Intelligence	
CS 4610	Robotic Science and Systems	
IS 4200	Information Retrieval	
DS 4420	Machine Learning and Data Mining 2	
PSYC 3466	Cognition	

### CONCENTRATION: FOUNDATIONS

Code	Title	Hours
CS 2800 and CS 2801 or CS 4820	Logic and Computation and Lab for CS 2800 Computer-Aided Reasoning	4-5
CS 4805 or CS 4810	Advanced Theory of Computation Advanced Algorithms	4
Complete two of the following classes not already taken:		8
CS 4805	Advanced Theory of Computation	
CS 4810	Advanced Algorithms	
CS 4820	Computer-Aided Reasoning	
CS 4830	System Specification, Verification, and Synthesis	
CS 3950 and CS 4950 and CS 4950	Introduction to Computer Science Research and Computer Science Research Seminar and Computer Science Research Seminar	
CY 4770	Cryptography	

### CONCENTRATION: HUMAN-CENTERED COMPUTING

Code	Title	Hours
IS 4300	Human Computer Interaction	4
IS 4800	Empirical Research Methods	4
Complete two of the following classes not already taken:		8
IS 2000	Principles of Information Science	
IS 4700	Social Information Systems	
CS 4120	Natural Language Processing	
CS 4520	Mobile Application Development	
CS 4550	Web Development	
DS 4200	Information Presentation and Visualization	

\*The concentration in human-centered computing requires a fall co-op pattern.

### CONCENTRATION: SOFTWARE

Code	Title	Hours
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3700	Networks and Distributed Systems	4
CS 4400	Programming Languages	4
Complete one of the following classes not already taken:		4

CS 3520	Programming in C++
CS 3620	Building Extensible Systems
CS 4240	Large-Scale Parallel Data Processing
CS 4410	Compilers
CS 4550	Web Development
CS 4520	Mobile Application Development
CS 4820	Computer-Aided Reasoning

### CONCENTRATION: SYSTEMS

Code	Title	Hours
CS 3700	Networks and Distributed Systems	4
Complete one of the following classes not already taken:		4
CY 3740	Systems Security	
CY 4740	Network Security	
Complete two of the following classes not already taken:		8
CS 3520	Programming in C++	
CS 4300	Computer Graphics	
CY 3740	Systems Security	
CS 4610	Robotic Science and Systems	
CS 4710	Mobile and Wireless Systems	
CS 4650	High Performance Computing	
CY 4740	Network Security	

### Supporting Courses

Code	Title	Hours
<b>Mathematics Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering (a grade of C- or higher is required)	4
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Science Courses</b>		
Complete one course from one of the following groups:		5
<i>Biology</i>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
<i>Chemistry</i>		
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	
<i>Geology</i>		
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History	
<i>Mathematics</i>		
MATH 1342	Calculus 2 for Science and Engineering	
MATH 2331	Linear Algebra	
MATH 3081	Probability and Statistics	
<i>Physics</i>		
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161

**Computing and Social Issues**

Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics
ENGL 2150	Literature and Digital Diversity
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

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

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	MATH 1341
CS 1800 and CS 1802	5	CS 2810	4	Elective	4	Elective
CS 2500 and CS 2501	5	MATH 1365	4			
ENGW 1111	4	Elective	4			
Foreign language course	4					
		19		17		8

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3650	4	Co-op		Co-op		Elective
CS 3000	4					Elective
Concentration course	4					
Foreign language course	4					
CS 1210	1					
		17		0		0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3800	4	Co-op		Co-op		ENGW 3302
Foreign language course	4					Elective
Concentration course	4					
Science course with lab	5					
THTR 1170	1					
		18		0		0

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Khoury elective	4	CS 4500	4			
Computing and social issues course	4	Concentration course	4			
Concentration course	4	Elective	4			
Security course	4	Elective	4			
		16		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 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 2810	4				
CS 2500 and CS 2501	5	MATH 1365	4				
ENGW 1111	4	Security course	4				
Foreign language course	4						
	19		17		0		0
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						
CS 1210	1						
Foreign language course	4						
	17		0		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3650	4	Co-op	0	Co-op	0	Elective	4
CS 3800	4					Elective	4
Foreign language course	4						
Elective	4						
	16		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	ENGW 3302	4
Concentration course	4					Elective	4
Concentration course	4						
Concentration course	4						
	16		0		0		8
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Computing and social issues	4	THTR 1170	1				
Khoury elective	4	CS 4500	4				
Science elective with lab	5	Concentration course	4				
Elective	4	Elective	4				

Elective 4

17 17

Total Hours: 135

### Computer Science, Minor

A computer science minor is designed to provide the computer science skills and know-how you need to succeed in today's highly digital world. A minor requires completion of five CS courses—more than enough to gain proficiency while easily fitting around your major requirements. No prior programming experience is needed.

Looking to gain technical knowledge that directly applies to your major? Students have the option to pursue a Khoury meaningful minor.

### Minor Requirements

*Note:* Khoury minors are only available to non-Khoury majors; students in Khoury-only or Khoury-combined degrees are not eligible for Khoury minors. A student may receive at most one Khoury minor, regardless of how many Khoury minors they qualify for.

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

### Required Courses

Code	Title	Hours
<b>Computer Science Fundamental Courses</b>		
A grade of C– or higher is required in computer science fundamental courses:		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Electives

Code	Title	Hours
Complete three courses that are not already required in the following ranges:		12

CS 2500 to CS 7999 but not CS 3950, CS 4950, or CS 5010

IS 4200 Information Retrieval

IS 4300 Human Computer Interaction

One course from CCIS meaningful minors list (see below).

### Khoury Meaningful Minors

The concept of “Khoury meaningful minors” allows students the chance to personalize a computer science minor to meet individual academic needs and interests. Students may take *one elective* related to computation or information from a pre-approved list of courses offered across the university rather than from within Khoury. This allows students to integrate the minor with a course in their own major or with a course in another area of interest. Students may of course choose to take all electives in the minor within Khoury if they wish.

Code	Title	Hours
<b>Bouvé Health Sciences</b>		
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
<b>Arts, Media and Design</b>	
ARTD 2360	Introduction to Photography
ARTD 2370	Animation Basics
ARTD 2380	Video Basics
ARTG 2260	Programming Basics
ARTG 2400	Interaction Design 1: Responsive
ARTG 3250	Physical Computing
ARTG 3451	Information Design 1
ARTG 3700	Interaction Design 2: Mobile
ARTG 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
<b>Engineering</b>	
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
<b>Khoury Computer Sciences</b>	
CS 1100	Computer Science and Its Applications
CS 1800	Discrete Structures
IS 1500 or higher, except IS 4900	
<b>Science</b>	
BIOL 2301	Genetics and Molecular Biology
BIOL 3405	Neurobiology
BIOL 5587	Comparative Neurobiology
BINF 6200	Bioinformatics Programming
BINF 6308	Bioinformatics Computational Methods 1
BINF 6309	Bioinformatics Computational Methods 2
CHEM 5638	Molecular Modeling
ENVR 3300	Geographic Information Systems
ENVR 5563	Advanced Spatial Analysis
LING 3450	Syntax
LING 3452	Semantics
MATH 1260	Math Fundamentals for Games
MATH 2331	Linear Algebra
MATH 2341	Differential Equations and Linear Algebra for Engineering

MATH 3530	Numerical Analysis
MATH 4606	Mathematical and Computational Methods for Physics
PHYS 1130	Computing, Data, and Science
PSYC 3452	Sensation and Perception
PSYC 3458	Biological Psychology
PSYC 3464	Psychology of Language
PSYC 3466	Cognition
<b>Social Science and Humanities</b>	
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
<b>D'Amore-McKim School of Business</b>	
ACCT 3403	Advisory Services and Emerging Accounting Systems
ENTR 4501	Advanced Studies in Entrepreneurial Startups
FINA 4608	Advanced Financial Strategy
MISM 2301	Management Information Systems
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
<b>Statistics Courses</b>	
CRIM 3700	Analyzing and Using Data on Crime and Justice
ECON 2350	Statistics
ECON 5105	Math and Statistics for Economists
ENVR 2500	Biostatistics
IE 3412	Engineering Probability and Statistics
MATH 2280	Statistics and Software
MATH 3081	Probability and Statistics
MATH 4581	Statistics and Stochastic Processes
MGSC 2301	Business Statistics
PHMD 3450	Research Methodology and Biostatistics
PHTH 2210	Foundations of Biostatistics
POLS 2400	Quantitative Techniques
PSYC 2320	Statistics in Psychological Research
SOCL 2320	Statistical Analysis in Sociology

**Credit/GPA Requirement**

20 semester hours required

2.000 GPA required in the minor

## Cybersecurity

Cybersecurity combines essential computer science with conceptual and practical specialization in security to prepare students for hands on, deeply technical work in the field. The ability to frame problems, select computational models, design program structures, and develop efficient algorithms is as important in computer science as software implementation skill. All cybersecurity students take the standard computer science course sequence, covering content such as basic programming, object-oriented design, computer architecture and operating systems, computer networks and distributed systems, and algorithmic complexity and computability theory. These courses lay the foundation for cybersecurity-specific coursework.

Cybersecurity coursework covers key areas in the field, from a broad overview of the topical space (including threat modeling, symmetric and asymmetric key cryptography, authentication, access control, social engineering, simple exploits, basic systems security, malware, the cybercrime underground, and advanced persistent threat actors) to deep dives into the design of secure operation systems and applications. Fundamental topics include analyzing prevalent classes of attacks against systems, security vulnerabilities and defense techniques, limitation of damage and strategic recovery, design and implementation of distributed authentication protocols, and existing standardized security protocols and legal infrastructure relating to privacy, data ethics, data security, hacking, automation, and intellectual property. In addition, cybersecurity students have access to a wide array of electives, including courses on wireless networking, software vulnerabilities, cybersecurity risk management and assessment, digital forensics, and criminology.

## Programs

### Bachelor of Science (BS)

- Cybersecurity (p. 310)

## Cybersecurity, BS

The Bachelor of Science in Cybersecurity teaches students the conceptual and practical skills that will enable them to contribute to ensuring the reliability and security of cyberspace. The program will provide students with the fundamental knowledge of computer science that forms the technical foundation of the field, with an essential focus on experiential learning through laboratory exercises in the security-related courses, as well as through the co-op program. The program's holistic view of cybersecurity gives it a strong interdisciplinary focus, teaching students how social behavior, policy, and legal rules can affect cybersecurity and the tools of information technology.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
CS 3800	Theory of Computation	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4
CY 4770	Cryptography	4
CY 4930 or CY 4940	Cybersecurity Capstone Research Projects on National Security	4
<b>Cybersecurity and Social Issues Elective List</b>		
Choose one:		
COMM 2525	Communication and Privacy	
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	

## Choose one: Cybersecurity Electives OR Cyber Operations Concentration

Students have a choice between completing the BS Cybersecurity with the below Cybersecurity Elective options, or with the Cyber Operations Concentration. The degree automatically defaults to the Cybersecurity

Elective options. Students looking to choose the Cyber Operations Concentration option must declare the concentration with their Academic Advisor.

### CYBERSECURITY ELECTIVES:

Code	Title	Hours
<b>Law Requirement</b>		
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
<b>Cybersecurity Electives</b>		
If courses require prerequisites, those should be taken using general electives.		
Complete four courses from the following:		16
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	
CRIM 2200	Criminology	
CRIM 3400	Corporate Security: Securing the Private Sector	
CRIM 4040	Crime Prevention	
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	
CS 4240	Large-Scale Parallel Data Processing	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4710 or CS 6710	Mobile and Wireless Systems Wireless Network	
CY 5010	Foundations of Information Assurance	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 3324	Computer Architecture and Organization	
EECE 4534 and EECE 4535	Microprocessor-Based Design and Lab for EECE 4534	
IS 4300	Human Computer Interaction	
LPSC 1101	Introduction to Law	
LPSC 2301	Introduction to Law, Policy, and Society	
LPSC 3303	Topics in Law and Public Policy	
MATH 3527	Number Theory 1	
MATH 4575	Introduction to Cryptography	
MISM 2301 or MISM 2309	Management Information Systems Management Information Systems	
POLS 2390	Science, Technology, and Public Policy	
POLS 3307	Public Policy and Administration	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3408	International Security	

POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism

### CYBER OPERATIONS CONCENTRATION:

Code	Title	Hours
<b>Cyber Operations Required Courses</b>		
CS 4710	Mobile and Wireless Systems	4
CY 5770	Software Vulnerabilities and Security	4
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	4
<b>Electives</b>		
Complete two of the following:		8
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
EECE 3324	Computer Architecture and Organization	
EECE 4534	Microprocessor-Based Design	

### Supporting Courses

Code	Title	Hours
<b>Electrical Engineering Required Course</b>		
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Mathematics Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 3081	Probability and Statistics	4

### Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

### Computer Science Credit Requirements

Complete 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 co-op.

### Program Requirement

133 semester hours required

### Plan of Study

#### Sample Plan of Study

#### FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1801	4	CY 2550	4	MATH 1342	4		
CS 2500 and CS 2501	5	MATH 1341	4				
ENGW 1111	4	General elective 2	4				
General elective 1	4						
	18		17		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	CS 3700	4	ENGW 3302 or 3315	4	Co-op	
CS 3650	4	CY 3740	4	MATH 3081	4		
CS 3800	4	CY 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		CY 4740	4	General elective 5	4	Co-op	
		CY 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	1	(If needed)	
		Cybersecurity elective	4	General elective 6	4
		CY 4930 or 4940	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**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510	4	CS 3500	4	Vacation	
CS 2500	4	CS 2511	1	MATH 1342	4		
CS 2501	1	CY 2550	4				
ENGW 1111	4	MATH 1341	4				
General elective 1	4	General elective 2	4				
CS 1800	4						
CS 1801	0						
	18		17		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 3700	4	Vacation		Co-op	
CS 3650	4	CY 3740	4				
MATH 3081	4	General elective 4	4				
General elective 3	4	General elective 5	4				
THTR 1170	1						
	17		16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 4740	4	ENGW 3302	4	Co-op	
		CS 3800	4	General elective 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		CY 5240	4	Vacation		Co-op	
		CY 4770	4				
		Cybersecurity elective 1	4				
		Cybersecurity elective 2	4				
	0		16		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		CY 4930	4
		Cybersecurity elective 3	4
		Cybersecurity elective 4	4

Cybersecurity elective 5 / social issues	4
0	16

Total Hours: 132

## 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 coursework covers exploratory data analysis, data manipulation in a variety of programming languages, large-scale data storage, predictive analytics, machine learning, data mining, and information visualization and presentation. Data science has emerged as a discipline due to the confluence of two major events:

1. The ability to collect, store, prune, process, and transmit large amounts of data in the cloud, 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. 313)
- Data Science, Minor (p. 315)

#### 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

<b>Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
<b>Programming Sequence Pathways</b>		
Choose one of the two options.		12
<i>Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
CS 3500	Object-Oriented Design	
<i>Data Science Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	
DS 3500	Advanced Programming with Data	
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3520	Programming in C++	4
<b>Data Science Electives</b>		
Complete three of the following:		12
CS 4100	Artificial Intelligence	
CS 4120	Natural Language Processing	
IS 4200	Information Retrieval	
IS 4300	Human Computer Interaction	
<b>Data Science Required Courses</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4
DS 4440	Practical Neural Networks	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Mathematics Foundations</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Data Science and Ethics</b>		
PHIL 1145	Technology and Human Values	4
<b>Khoury Elective Courses</b>		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		

IS 2000 or higher, except IS 4900		
<b>Data Science Related Electives in Other Units</b>		<b>4</b>
Complete one of the following:		
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: Fundamentals	
ARTG 6100	Information Design Studio 2: Dynamic Mapping and Models	
ARTG 6200	Information Design Studio 3: Synthesis	
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	
ECON 2350	Statistics	
ECON 2560	Applied Econometrics	
EECE 4542	Advanced Engineering Algorithms	
EECE 5639	Computer Vision	
EECE 5642	Data Visualization	
EECE 5644	Introduction to Machine Learning and Pattern Recognition	
ENVR 2500	Biostatistics	
FINA 4608	Advanced Financial Strategy	
GSND 5110	Game Design and Analysis	
GSND 6350	Data-Driven Player Modeling	
HINF 5101	Introduction to Health Informatics and Health Information Systems	
HINF 5102	Data Management in Healthcare	
HINF 5300	Personal Health Interface Design and Development	
HINF 5301	Personal Health Technologies: Field Deployment and System Evaluation	
IS 4800	Empirical Research Methods	
IE 5640	Data Mining for Engineering Applications	
MATH 2321	Calculus 3 for Science and Engineering	
MATH 4581	Statistics and Stochastic Processes	
MGSC 2301	Business Statistics	
MISM 3305	Information Resource Management	
MISM 3403	Data Management in the Enterprise	
MKTG 3401	Marketing Research	
MKTG 3501	Marketing Analytics	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
PSYC 2320	Statistics in Psychological Research	
PSYC 3466	Cognition	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**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**

131 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	
CS 1200	1	DS 2500 and DS 2501	5	CS 3200	4	
CS 1800 and CS 1802	5	MATH 1342	4	MATH 3081	4	
DS 2000 and DS 2001	4	PHIL 1145	4			
ENGW 1111	4	Elective	4			
MATH 1341	4					
		18		17		8
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3520	4	DS 4200	4	CS 3000	4	Co-op
DS 3000	4	DS 4300	4	ENGW 3302	4	
MATH 2331	4	IS 4300	4			
DS 3500	4	Elective	4			
		CS 1210	1			
		16		17		8
0						
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		DS 4400	4	Co-op		Co-op
		CS 4100	4			
		THTR 1170	1			
		Elective	4			

	Elective	4		
	0	17	0	0
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
IS 4200	4	DS 4420	4	
CS 4120	4	DS 4440	4	
Khoury Elective	4	Data Science Related Elective	4	
Elective	4	Elective	4	
	16		16	

Total Hours: 133

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

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 1200	1	DS 2500 and DS 2501	5	Vacation		Vacation	
DS 2000 and DS 2001	4	MATH 1342	4				
CS 1800 and CS 1802	5	CS 3200	4				
MATH 1341	4	PHIL 1145	4				
ENGW 1111	4						
	18		17		0		0

<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
DS 3000	4	CS 1210	1	Vacation		Co-op	
CS 3000	4	CS 3520	4				
MATH 3081	4	DS 4300	4				
DS 3500	4	IS 4300	4				
		MATH 2331	4				
	16		17		0		0

<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		DS 4400	4	ENGW 3302	4	Co-op	
		Elective	4	Elective	4		
		CS 4100	4				
		THTR 1170	1				
		DS 4200	4				
	0		17		8		0

<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		DS 4420	4	Elective	4	Co-op	
		CS 4120	4	Elective	4		
		IS 4200	4				
		Elective	4				
	0		16		8		0

<b>Year 5</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Co-op		DS 4440	4

Data Science Related Elective	4
Elective	4
Elective	4
0	16

Total Hours: 133

### Data Science, Minor

The minor in data science studies the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes.

### Minor Requirements

*Note: Khoury minors are only available to non-Khoury majors; students in Khoury-only or Khoury-combined degrees are not eligible for Khoury minors. A student may receive at most one Khoury minor, regardless of how many Khoury minors they qualify for.*

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

### Required Courses

Code	Title	Hours
<b>Computer Science Fundamental Courses</b>		
Complete one of the following options:		9-10
<i>Fundamentals of Computer Science Option</i>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
<i>Programming with Data Option</i>		
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
DS 2500 and DS 2501	Intermediate Programming with Data and Lab for DS 2500	

### Data Science Required Course

DS 3000	Foundations of Data Science	4
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### Data Science Electives

Code	Title	Hours
Complete two of the following. Only one course from the Meaningful Minor list may contribute toward the minor requirements:		8
CS 3200	Database Design	
DS 2010 to DS 4989		
Meaningful Minor list (see below)		

### Khoury Meaningful Minors

The concept of “Khoury Meaningful Minors” allows students the chance to personalize a computer science minor to meet individual academic needs and interests. Students may take *one elective* related to computation or information from a preapproved list of courses offered across the university rather than from within Khoury. This allows students to integrate the minor with a course in their own major or with a course

in another area of interest. Students may of course choose to take all electives in the minor within Khoury if they wish.

Code	Title	Hours
<b>Arts, Media and Design</b>		
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: Fundamentals	
ARTG 6100	Information Design Studio 2: Dynamic Mapping and Models	
ARTG 6200	Information Design Studio 3: Synthesis	
GSND 5110	Game Design and Analysis	
GSND 6350	Data-Driven Player Modeling	
<b>Bouvé Health Sciences</b>		
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	
<b>D'Amore-McKim—Business</b>		
FINA 4608	Advanced Financial Strategy	
MISM 3305	Information Resource Management	
MISM 3403	Data Management in the Enterprise	
MISM 3515	Data Mining for Business	
MKTG 3401	Marketing Research	
MKTG 3501	Marketing Analytics	
SCHM 2301	Supply Chain and Operations Management	
<b>Computer and Information Science</b>		
CY 5010	Foundations of Information Assurance	
CY 5200	Security Risk Management and Assessment	
<b>Engineering</b>		
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
EECE 4542	Advanced Engineering Algorithms	
EECE 5642	Data Visualization	
EECE 5644	Introduction to Machine Learning and Pattern Recognition	
EECE 5639	Computer Vision	
IE 5640	Data Mining for Engineering Applications	
<b>Science</b>		
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	
ENVR 2500	Biostatistics	
MATH 2331	Linear Algebra	

MATH 2341	Differential Equations and Linear Algebra for Engineering
MATH 3081	Probability and Statistics
MATH 4581	Statistics and Stochastic Processes
PSYC 2320	Statistics in Psychological Research
<b>Social Science and Humanities</b>	
ECON 2350	Statistics
ECON 2560	Applied Econometrics
ECON 3916	Intermediate Selected Topics in Microeconomics
POLS 2400	Quantitative Techniques

## GPA Requirement

2.000 GPA required in the minor

## Khoury Combined Majors

Khoury College offers combined majors with over 25 partner disciplines. Combined majors are carefully constructed degrees allowing students to explore multiple academic fields while staying on track for graduation. Each of the combined majors offers the opportunity for intense study in two disciplines with appropriate breadth in the liberal arts. Students take nine to 13 courses in each subject and at least one integrative course that binds the disciplines together. These programs offer an excellent educational opportunity for the ambitious student.

## Programs

### Bachelor of Science (BS)

- Computer Engineering and Computer Science (p. 317)
- Computer Science and Behavioral Neuroscience (p. 320)
- Computer Science and Biology (p. 322)
- Computer Science and Business Administration (p. 269)
- Computer Science and Cognitive Psychology (p. 331)
- Computer Science and Communication Studies (p. 174)
- Computer Science and Criminal Justice (p. 336)
- Computer Science and Design (p. 96)
- Computer Science and Economics (p. 341)
- Computer Science and English (p. 343)
- Computer Science and Environmental Science (p. 346)
- Computer Science and Game Development (p. 99)
- Computer Science and History (p. 351)
- Computer Science and Journalism (p. 199)
- Computer Science and Linguistics (p. 356)
- Computer Science and Mathematics (p. 358)
- Computer Science and Media Arts (p. 100)
- Computer Science and Music with Concentration in Music Technology (p. 218)
- Computer Science and Philosophy (p. 366)
- Computer Science and Physics (p. 368)
- Computer Science and Political Science (p. 371)
- Computer Science and Sociology (p. 375)
- Cybersecurity and Business Administration (p. 274)
- Cybersecurity and Criminal Justice (p. 380)
- Cybersecurity and Economics (p. 382)
- Data Science and Biochemistry (p. 384)
- Data Science and Biology (p. 386)

- Data Science and Behavioral Neuroscience (p. 388)
- Data Science and Business Administration (p. 276)
- Data Science and Environmental Science (p. 398)
- Data Science and Ecology and Evolutionary Biology (p. 393)
- Data Science and Economics (p. 396)
- Data Science and Health Science (p. 400)
- Data Science and Journalism (p. 203)
- Data Science and Linguistics (p. 404)
- Data Science and Mathematics (p. 407)
- Data Science and Physics (p. 409)
- Data Science and Psychology (p. 411)

### Bachelor of Science in Computer Engineering (BSCompE)

- Computer Engineering and Computer Science (p. 317)

#### 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
CS 3000	Algorithms and Data	4
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
<b>Electrical Engineering Fundamentals</b>		
Complete one of the following:		4
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Complete two of the following:		8
EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5155 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	
<b>CS/IS/CY Technical Electives</b>		8
Complete two of the following:		
CS 3200	Database Design	
CS 3520	Programming in C++	
CS 3540	Game Programming	
CS 3700	Networks and Distributed Systems	
CS 3800	Theory of Computation	
CS 4100 to CS 4410		
CS 4510 to CS 4650		
CS 4740 to CS 4760		
CS 4850	Building Game Engines	
CY 2550	Foundations of Cybersecurity	
CY 3740	Systems Security	



IS 4200 to IS 4700

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501 Cornerstone of Engineering 1

3 semester hours from the following course count toward the engineering requirement: 3

GE 1502 Cornerstone of Engineering 2

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2

**Computer Science Requirements**

Code	Title	Hours
<b>Computer Science Introductory Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5

CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5

**Computer Science Upper-Level Courses**

CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 4500	Software Development	4

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8 SH of academic, nonremedial, nonrepetitive courses.		8

**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 and PHYS 1152	Physics for Engineering 1 and Lab for PHYS 1151	4
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4

**Major GPA Requirement**

2.000 minimum GPA in EECE courses

2.000 minimum GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

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 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				

GE 1000	1	PHYS 1152 (AD)	1			
GE 1501	4	PHYS 1153	1			
MATH 1341 (FQ)	4	General Elective	4			
	17		17	0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	CS 2510 (ND, AD)	4	Vacation	0	Co-op	0
CS 1802	1	CS 2511	1				
CS 2500 (ND, FQ)	4	CS 2800	4				
CS 2501	1	CS 2801	1				
MATH 2341	4	EECE 2160	4				
PHYS 1155 (ND)	3	ENCP 2000	1				
PHYS 1156 (AD)	1	General Elective	4				
PHYS 1157	1						
	19		19	0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 3650	4	CS 3500 (ND, AD)	4	Co-op	0
		EECE 2150 (AD)	5	ENGW 3302 or 3315 (WD)	4		
		CE Fundamentals	4				
		CE Fundamentals	5				
	0		18	8		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	CS 3000	4	Co-op	0
		MATH 3081 (AD)	4	EECE 4790 (EI, WI, CE)	4		
		CE Fundamentals	4				
		CS Technical Elective	4				
		EE Fundamentals	4				
	0		17	8		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CS 4500 (WI)	4
		EECE 4792 (EI, WI, CE)	4
		EECE Technical Elective	4

EECE Technical Elective	4
0	16

Total Hours: 139

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17	0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	Co-op	0	Co-op	0	Vacation	0
CS 1802	1						
CS 2500 (ND, FQ)	4						
CS 2501	1						
ENCP 2000	1						
MATH 2341	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
	20		0	0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 2510 (ND, AD)	4	Co-op	0	Co-op	0	ENGW 3302 or 3315 (WD)	4
CS 2511	1					MATH 3081 (AD)	4
CS 2800	4						
CS 2801	1						
EECE 2150 (AD)	5						
EECE 2160	4						
	19		0	0		0	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 (ND, AD)	4	Co-op	0	Co-op	0	CS 3000	4
CS 3650	4					EECE 4790 (EI, WI, CE)	4
ENCP 3000	1						

CE Fundamentals	4			
CE Fundamentals	5			
	18	0	0	8
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
EECE 4792 (EI, WI, CE)	4	CS 4500 (WI)	4	
CE Fundamentals	4	EECE Technical Elective	4	
CS Technical Elective	4	EECE Technical Elective	4	
EE Fundamentals	4	General Elective	4	
	16		16	
Total Hours: 139				

## Computer Science and Behavioral Neuroscience, BS

The Bachelor of Science in Computer Science and Behavioral Neuroscience underscores how research in neuroscience has become a computational field of study. The combined major is designed for students who are interested in applying mathematical and computational methodologies toward understanding human behavior, artificial intelligence, and the human-machine interface. Courses across multiple science disciplines—including biology, chemistry, and computer science—lay a strong foundation necessary to explore brain mechanisms and how they give rise to behavioral functions and pathological states using computational approaches. Students will have an opportunity to develop skills in software development as they apply algorithms and data structures to brain research and neurotechnology.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Requirements

Code	Title	Hours
<b>Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Hourly Co-op <sup>2</sup>	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4100	Artificial Intelligence	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Supporting Course for Computer Science

THTR 1170	The Eloquent Presenter	1
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### Statistics Foundation

Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
PSYC 2320	Statistics in Psychological Research	

<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000).

<sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).

### Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405	Neurobiology	4

or BIOL 5587	Comparative Neurobiology	
PT 5410 and PT 5411	Functional Human Neuroanatomy and Lab for PT 5410	4-5
or PSYC 3200	Clinical Neuroanatomy	

**Psychology Elective**

Complete one of the following:		4
PSYC 3358	Behavior Therapies	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	

**Behavioral Neuroscience Core Courses**

Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
IS 4300	Human Computer Interaction	4
or CS 4120	Natural Language Processing	
or CS 4180	Reinforcement Learning	
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4
or BINF 6308	Bioinformatics Computational Methods 1	

**Upper-Division Elective**

Complete four credits from the following list, not taken to fulfill previous requirements:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
BNSC 4970 or higher		
BIOL 3400 or higher		

BINF 6309	Bioinformatics Computational Methods	2
PSYC 3200 or higher		

**Supporting Courses**

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Computer Science and Behavioral Neuroscience Major Credit Requirement**

103 SH required in the major

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns: Five Years, Three Co-ops**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation
CS 1800 and CS 1802	5	BIOL 2299	4			
CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5			
BIOL 1107 and BIOL 1108	5	MATH 1341	4			
ENGW 1111	4					
		20			18	0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3500	4	CS 3000	4	Vacation		Co-op
		20			18	0

BIOL 3405 or 5587	4	CHEM 2311 and CHEM 2312	5
PSYC 1101	4	PSYC 3200	4
BIOL 2301 and BIOL 2302	5	General elective	4
		CS 1210	1
		17	18
		0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3200	4	General elective		4	Co-op
		CS 4500	4	PSYC elective		4	
		THTR 1170	1				
		Statistics requirement	4				
		BNS core	4				
		0	17	8		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op		CS 4100	4	Co-op	
		CS integrative course	4	ENGW 3302 (online)	4
		BNS core	4		
		General elective	4		
		0	16		4

**Year 5**

Fall	Hours	Spring	Hours
Co-op		Upper-division elective	4
		BNS integrative course	4
		Computing and social issues	4
		General elective	4
		0	16

Total Hours: 134

### Four Years, Two Co-ops

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	MATH 1341	4	PSYC 1101	4		
CS 2500 and CS 2501	5	BIOL 2299	4				

BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5
ENGW 1111	4		
		20	18
		8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	PSYC elective		4	Co-op
CS 3000	4	CHEM 2311 and CHEM 2312	5	General elective		4	
BIOL 3405 or 5587	4	PSYC 3200	4				
BIOL 2301 and BIOL 2302	5	General elective	4				
		Statistics course	4				
		17	18	8		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		THTR 1170	1	General elective		4	Co-op
		CS 4500	4	Upper-division elective		4	ENGW 3302 (online)
		BNS core	4				
		CS integrative course	4				
		BNS core	4				
		0	17	8		4	

**Year 4**

Fall	Hours	Spring	Hours
Co-op		CS 4100	4
		Computing and social issues	4
		BNS integrative course	4
		General elective	4
		0	16

Total Hours: 134

## Computer Science and Biology, BS

The computer science and biology combined major reflects how research in biology, especially genetics, has become a computational science. The program provides a strong foundation in biology, chemistry, and mathematics, as well as software development and algorithms.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
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### Computer Science Overview

CS 1200	First Year Seminar <sup>1</sup>	
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	

### Computer Science Fundamental Courses

A grade of C– or higher is required in all computer science fundamental courses except CS 1802:

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation (integrative course)	4
CS 4500 and CS 4501	Software Development and	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective Courses

With advisor approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2000 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

<sup>1</sup> Students entering through the biology department may take Biology at Northeastern (BIOL 1000).

<sup>2</sup> Students entering through the biology department may take Professional Development for Co-op (EESC 2000).

## Biology Courses

Code	Title	Hours
<b>Foundations of Biology</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<b>Inquiries</b>		
BIOL 2299	Inquiries in Biological Sciences	4
<b>Molecular Biology</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Techniques in Biology</b>		
BIOL 2309	Biology Project Lab	4
<b>Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Biology Capstone</b>		
BIOL 4701	Biology Capstone	4
<b>Intermediate and Advanced Biology Electives</b>		
Complete two biology courses (with corequisite labs if offered). Choose one of these two courses from the following list:		9-10
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	
Choose the second elective from the following list:		4-5
BIOL 2311 to 4999, EEMB 2290 to 5515, EEMB 5520 to 5534, EEMB 5548 to 5569, EEMB 2400		
<b>Biology Integrative Course</b>		
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 4548 Sociobiology

**Supporting Courses**

Code	Title	Hours
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**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 following: 4-5

MATH 3081 Probability and Statistics

ENVR 2500 Biostatistics

and ENVR 2501 and Lab for ENVR 2500

**Computing and Social Issues**

Complete one of the following: 4

ANTH 3418 Wired/Unwired: Cybercultures and Technopolitics

ENGL 2150 Literature and Digital Diversity

CY 5240 Cyberlaw: Privacy, Ethics, and Digital Rights

INSH 2102 Bostonography: The City through Data, Texts, Maps, and Networks

PHIL 1145 Technology and Human Values

SOCL 1280 The Twenty-First-Century Workplace

SOCL 3485 Environment, Technology, and Society

SOCL 4528 Computers and Society

**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
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**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
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Complete 16 credits of general electives 16

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World

- Conducting Formal and Quantitative Reasoning

- Exploring Creative Expression and Innovation

- Analyzing and Using Data

- Writing in the First Year

- Advanced Writing in the Disciplines

- Writing-Intensive in the Major

- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

141 total semester hours required

**Plan of Study****Sample Patterns:****Four Years, Two Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	BIOL 2301	4	Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4	BIOL 2302	4		1
CS 2500 and CS 2501	5	ENGW 1111	4	Elective	4		
BIOL 1107 and BIOL 1108	5	Elective	4				
CHEM 1161	4						
CHEM 1162	1						
CHEM 1163	0						
	21		17		9		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	Elective	4	Co-op	
CHEM 2311 and CHEM 2312	5	CHEM 2313 and CHEM 2314	5	BIOL 2309	4		
CS 3200	4	CS 3000	4				
MATH 1251	4	BIOL 3611	4				
		BIOL 3612	1				
		MATH 1252	4				
	17		19		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	ENGW 3302	4	Co-op	

Computing and social issues	4	ENVR 2500 and ENVR 2501 (or MATH 3081)	5		
BIOL elective	5				
BIOL integrative elective	4				
THTR 1170	1				
	0		18	9	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500 and CS 4501	4	BIOL Elective	4	Co-op	0
		BIOL 4701	4	Elective	4		
		BIOL Intermediate/Advanced elective	4				
		Khoury Elective	4				
	0		16		8		0

Total Hours: 142

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	ENGW 1111	4				
CS 1200	1	MATH 1251	4				
CHEM 1161	4						
CHEM 1162	1						
CHEM 1163	0						
	21		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 3000	4	Vacation	0	Co-op	0
CS 3200	4	BIOL 2301	4				
CHEM 2311 and CHEM 2312	5	BIOL 2302	1				
MATH 1252	4	CHEM 2313 and CHEM 2314	5				
		CS 1210	1				
		Elective	4				
	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		17	9	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOL elective	5	Elective	4	Co-op	0
		Khoury Elective	4	Elective	4		
		ENVR 2500 and ENVR 2501 (or MATH 3081)	5				
		Computing and social issues	4				
	0		18		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CS 4500 and CS 4501	4
		BIOL integrative elective	4
		BIOL 4701	4
		BIOL Intermediate/Advanced elective	4
	0		16

Total Hours: 142

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	ENGW 1111	4				
CS 1200	1	MATH 1251	4				
CHEM 1161	4						
CHEM 1162	1						
CHEM 1163	0						
	21		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311 and CHEM 2312	5	Co-op	0	Co-op	0	Vacation	0
CS 3500	4						
CS 1210	1						
MATH 1252	4						
BIOL 2301	4						

BIOL 2302	1						
	19		0		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 3000	4	Co-op	0	Co-op	0	Elective	4
CHEM 2313 and CHEM 2314	5					ENGW 3302	4
BIOL 2309	4						
BIOL 3611	4						
BIOL 3612	1						
	18		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 3800	4	Co-op	0	Co-op	0	Elective	4
BIOL elective	4					Elective	4
Elective	4						
THTR 1170	1						
CS 3200	4						
	17		0		0		8
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
BIOL elective	5	CS 4500 and CS 4501	4				
Khoury Elective	4	BIOL 4701	4				
ENVR 2500 and ENVR 2501 (or MATH 3081)	5	BIOL integrative elective	4				
Computing and social issues	4	BIOL Intermediate/Advanced elective	4				
	18		16				

Total Hours: 142

## Computer Science and Business Administration, BS

The computer science and business combined major delivers a technical degree with a strong grounding in business. Students will complete most of the requirements of a business major, including macroeconomics and microeconomics, while also focusing on technical skills like program design, software development, computer organization, systems and networks, theories of computation, principles of languages, and advanced algorithms and data.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
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#### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

#### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

#### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

Complete two of the following:

CS 3650	Computer Systems	
CS 3700	Networks and Distributed Systems	
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	
DS 4300	Large-Scale Information Storage and Retrieval	

#### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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#### Khoury Elective

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Business Courses

Code	Title	Hours
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#### 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
STRT 4501	Strategy in Action	4

## Business Concentration

Complete a four-course business concentration from the following list.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Integrative Course

Code	Title	Hours
<b>Information Resource Management</b>		
MISM 2301	Management Information Systems	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

## 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 16 credits of general electives.		16

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

## Program Requirement

133 total semester hours required

## Concentrations

### CONCENTRATION IN ACCOUNTING

Code	Title	Hours
<b>Required Courses</b>		
ACCT 3401	Financial Reporting and Analysis 1	4
ACCT 4501	Financial Reporting and Analysis 2	4
<b>Electives</b>		
Complete two of the following:		8
ACCT 3403	Advisory Services and Emerging Accounting Systems	
ACCT 3416	Strategic Cost Analysis for Decision Making	
ACCT 4412	Auditing and Other Assurance Services	
ACCT 4414	Income Tax Determination and Planning	

**CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION**

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

ENTR 1201	The Entrepreneurial Universe	
ENTR 3308	Business Economic History of South Africa	
ENTR 3338	Field Research in Sustainable Energy in Iceland	
ENTR 4510	Management Consulting Abroad	
ENTR 4514	Development Practice and Global Citizenship in India	

**Introductory Course**

ENTR 2301	Innovation!	4
or ENTR 2303	Marketing Strategies for Startups	

**Capstone Course**

Complete one of the following: 4

ENTR 4501	Advanced Studies in Entrepreneurial Startups	
ENTR 4503	Advanced Studies in Family Business	
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures	
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship	

**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 2301	Innovation! (if not used as introductory course)	
ENTR 2303	Marketing Strategies for Startups (if not used for introductory course)	
ENTR 2304	Industry Disruption and Corporate Transformation	
ENTR 2414	Social Responsibility of Business in an Age of Inequality	
ENTR 3212	Innovation for Social Change	
ENTR 3217	Global Family Business Leadership	
ENTR 3220	International Entrepreneurship and Innovation Consulting	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 3306	Global Entrepreneurship	
ENTR 3330	Lean Design and Rapid Prototyping	
ENTR 3335	Product Innovation and Portfolio Management	
ENTR 3401	Consulting Operations Growth in SMEs	
ENTR 3403	Managing Operations in a Technology-Based Startup Firm	
ENTR 3520	Impact Investing and Social Finance	
ENTR 4225	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
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**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 2730	Fintech and Financial Innovation	
FINA 3301	Corporate Finance (if not selected as a required course)	
FINA 3303	Investments (if not selected as a required course)	
FINA 4219	Portfolio Management	
FINA 4220	Behavioral Finance	
FINA 4310	Working Capital Management	
FINA 4312	Issues in Corporate Governance	
FINA 4320	International Financial Management	
FINA 4330	Emerging Financial Markets	
FINA 4340	Blockchain Applications in Finance and Accounting	
FINA 4350	Applied Financial Econometrics	
FINA 4370	Financial Modeling	
FINA 4380	Financial Data Analytics with Python	
FINA 4390	Machine Learning in Finance	
FINA 4410	Valuation and Value Creation	
FINA 4412	Personal Financial Planning	
FINA 4420	Mergers and Acquisitions	
FINA 4512	Financial Risk Management	
FINA 4514	Investment Banking	
FINA 4516	Real Estate Finance	
FINA 4524	Credit Analysis	
FINA 4526	Core Topics in Alternative Investments	
FINA 4602	Turnaround Management	
FINA 4604	Fixed-Income Securities	
FINA 4608	Advanced Financial Strategy	
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity	
FINA 4983	Special Topics in Finance	

**CONCENTRATION IN MANAGEMENT**

Code	Title	Hours
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**Required Course**

MGMT 4550	Management Consulting in Organizations	4
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**Electives**

Note: Only one non-MGMT course may be used as an elective.

Complete three of the following: 12

ENTR 2215	Understanding Family Enterprise	
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ENTR 2414	Social Responsibility of Business in an Age of Inequality
ENTR 4225	Growth, Acquisitions, and Alliances
MGMT 3302	Negotiating in Business
MGMT 3305	Power and Influence
MGMT 3315	Managing Organizational Change and Disruption
MGMT 3340	Healthcare Management, Innovation, and Design
MGMT 3350	Managing a Diverse Workforce
MGMT 3360	Law and the Legal Process
MGMT 3380	Leading with Character
MGMT 3420	Managing Human Capital
MGMT 3435	Social Networks and Organizations
MGMT 3530	Project Management
MGMT 4310	The Management Practices of Great Organizations
MGMT 4410	Workforce Analytics
MGMT 4983	Special Topics in Management

SCHM 3315	Managing Healthcare Operations and Supply Chain
SCHM 3320	Demand Planning and Forecasting
SCHM 4401	Advanced Problems in Supply Chain Management
SCHM 4983	Special Topics in Supply Chain 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	CS 2510 and CS 2511	5	MATH 1341 or 1231	4	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	ACCT 1201	4		0
CS 2500 and CS 2501	5	ECON 1116	4				0
ENGW 1111	4	Elective	4				0
ECON 1115	4						0
		19			17	8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ACCT 2301	4	Business concentration 1	4	MKTG 2201	4	Co-op	4
CS 3500	4	CS 3000	4	Elective	4		0
MGSC 2301	4	Computing and social issues	4				0
Elective	4	CS 1210	1				0
		Elective	4				0
		16			17	8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3650	4	FINA 2201	4	Co-op	4
		MISM 2301	4	ORGB 3201	4		0
		Business concentration 2	4				0
		Khoury Elective	4				0
		THTR 1170	1				0
		0			17	8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3700	4	STRT 4501	4		0
		CS 4500	4	ENGW 3302	4		0
		Business concentration 3	4				0

**CONCENTRATION IN MARKETING**

Code	Title	Hours
<b>Required Courses</b>		
MKTG 3401	Marketing Research	4
MKTG 3301	Marketing Management	4
or MKTG 4506	Consumer Behavior	4
<b>Electives</b>		
Complete two of the following:		8
MKTG 2301	Marketing and Society	
MKTG 3301	Marketing Management (if not selected as a required course)	
MKTG 3501	Marketing Analytics	
MKTG 4220	Marketing in Asia	
MKTG 4420	Sales Management	
MKTG 4502	Managing Customer Engagement in a Service World	
MKTG 4504	Advertising and Brand Promotion	
MKTG 4506	Consumer Behavior (if not selected as a required course)	
MKTG 4508	Digital Marketing	
MKTG 4510	New Product Development	
MKTG 4512	International Marketing	
MKTG 4983	Special Topics in Marketing	

**CONCENTRATION IN SUPPLY CHAIN MANAGEMENT**

Code	Title	Hours
<b>Required Courses</b>		
SCHM 3301	Global Supply Chain Strategy	4
SCHM 3305	Sourcing and Procurement	4
SCHM 3310	Logistics and Transportation Management	4
<b>Elective</b>		
Complete one of the following:		4
SCHM 3308	Supply Chain Analytics	



Business concentration 4	4		
0	16	8	

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 3200	4				
CS 1200	1	ECON 1116	4				
ECON 1115	4	Elective	4				
ENGW 1111	4						
	19		17		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	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 concentration 1	4	MKTG 2201	4		
		MISM 2301	4				
		ENGW 3302	4				
		THTR 1170	1				
	0		17		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Business concentration 2	4	Elective	4	Co-op	0
		CS 3700	4	Elective	4		
		Business concentration 3	4				
		Khoury Elective	4				
	0		16		8		0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	STRT 4501	4				
		Business concentration 4	4				
		CS 4500	4				

Computing and social issues	4		
0	16		

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 3200	4				
CS 1200	1	ECON 1116	4				
ECON 1115	4	Elective	4				
ENGW 1111	4						
	19		17		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	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						
	17		0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3650	4	Co-op	0	Co-op	0	Elective	4
Business concentration 1	4					Elective	4
MISM 2301	4						
ENGW 3302	4						
	16		0		0		8

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury Elective	4	STRT 4501	4				
Business concentration 2	4	CS 4500	4				
Business concentration 3	4	Computing and social issues	4				

CS 3700	4 Business concentration 4	4
		16
		16

Total Hours: 134

## Computer Science and Cognitive Psychology, BS

The computer science and cognitive psychology combined major provides a foundation in general psychology, psychology of language, cognition, and statistics—all supplemented by an experimental laboratory course, seminar course, and psychology electives. Students who choose this program often have a general interest in human psychology or specific interests in artificial intelligence or human-computer interaction.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 4100	Artificial Intelligence (Integrative course)	4
CS 4500 or CS 4530	Software Development (Integrative course) Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction (Integrative course)	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective Courses

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete twelve credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Psychology Courses

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4
<b>Advanced Psychology</b>		
PSYC 3452 or PSYC 3458	Sensation and Perception Biological Psychology	4
<b>Laboratory in Psychology</b>		
Complete one of the following:		4
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4622	Laboratory in Sensation and Perception	
<b>Seminar in Psychology</b>		
Complete one of the following:		4
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
<b>Psychology Electives</b>		
Note: Courses satisfying the categories above cannot be reused.		
Complete two of the following:		8
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 4512	Neuropsychology	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	

With prior approval, directed study research and Honors Project courses can also be counted:

PSYC 4970	Junior/Senior Honors Project 1
PSYC 4971	Junior/Senior Honors Project 2
PSYC 4991	Directed Study Research

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
A grade of C- or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 32 credits of general electives.		32

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Writing in the First Year

- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample patterns:

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

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation
CS 1800 and CS 1802	5	PSYC 3466	4	Elective	4	
CS 2500 and CS 2501	5	MATH 1341	4			
PSYC 1101	4	Elective	4			
ENGW 1111	4					
		19		17		8
						0

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
PSYC 2320	4	Khoury elective	4	Elective	4	Co-op
CS 3000	4	IS 4300	4	Elective	4	
Elective	4	PSYC elective	4			
PSYC 3464	4	PSYC 3452 or 3458	4			
		CS 1210	1			
		16		17		8
						0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		CS 4100	4	Elective	4	Co-op
		PSYC lab elective	4	Elective	4	
		Khoury elective	4			
		Khoury elective	4			
		THTR 1170	1			
		0		17		8
						0

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		CS 4500	4	Elective	4	
		PSYC elective	4	ENGW 3302	4	
		PSYC seminar	4			

Computing and social issues	4		
0	16	8	

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	PSYC 3466	4				
CS 2500 and CS 2501	5	Elective	4				
PSYC 1101	4	Elective	4				
ENGW 1111	4						
		19			17		

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				
		Khoury elective	4				
		16			17		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	IS 4300	4	Elective	4	Co-op	0
		ENGW 3302	4	Elective	4		
		PSYC elective	4				
		Khoury elective	4				
		THTR 1170	1				
		0			17		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4100	4	Elective	4	Co-op	0
		Khoury elective	4	Elective	4		
		PSYC lab elective	4				
		PSYC elective	4				
		0			16		

Year 5			
Fall	Hours	Spring	Hours
Co-op	0	CS 4500	4
		PSYC seminar	4
		Computing and social issues	4

Elective	4
0	16

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	PSYC 3466	4				
PSYC 1101	4	Elective	4				
ENGW 1111	4	Elective	4				
CS 1200	1						
		19			17		

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						
CS 1210	1						
		17			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						
Khoury elective	4						
		17			0		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	Co-op	0	Co-op	0	Elective	4
ENGW 3302	4					Elective	4
PSYC elective	4						
Khoury elective	4						
		16			0		

Year 5				
Fall	Hours	Spring	Hours	
CS 4100	4	CS 4500	4	
Khoury elective	4	PSYC seminar	4	
PSYC lab elective	4	Computing and social issues	4	
PSYC elective	4	Elective	4	
		16		

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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4550	Web Development	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		12
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Communication Studies Courses

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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	
<b>Communication Studies Electives</b>		
Complete three courses in the following range: <sup>1</sup>		12
COMM 1131 to COMM 4996		

<sup>1</sup> Special Topics in Communication Studies (COMM 4912), and Junior/Senior Honors Project 1 (COMM 4970) are excluded.

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	

CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
COMM 3409	Advocacy Writing <sup>1</sup>	

<sup>2</sup> If Advocacy Writing (COMM 3409) is selected it will also satisfy a communication studies elective requirement. One additional general elective will be then required in its place.

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Communication Studies Grade Requirement**

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, IS

**Communication Studies GPA Requirement**

Minimum 2.000 GPA required in all COMM courses

**Program Requirement**

133 total semester hours required

**Plan of Study**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Elective	4
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4	Elective	4
CS 2500 and CS 2501	5	COMM 1112 or 2301	4				
ENGW 1111	4	Elective	4				
COMM 1101	4						
		19		17		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op	0	Co-op	0	Elective	4
Communication studies foundation course	4					Elective	4
Khoury elective	4						
CS 3000	4						
Elective	4						
		17		0		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1170	1	Co-op	0	Co-op	0	Elective	4
Communication studies cluster course	4					ENGW 3302 or 3315	4
Communication studies writing-intensive course	4						
Khoury elective	4						
Elective	4						
		17		0		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective	4	CS 4500	4				
Communication studies writing-intensive course	4	CS 4550	4				
Communication studies elective	4	Communication studies elective	4				



Computing and social issues	4	Communicati studies elective	4
	16		16

Total Hours: 134

## Computer Science and Criminal Justice, BS

For students interested in criminal justice in an increasingly digital world, the computer science and criminal justice combined degree offers a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
	or CRIM 2000 Co-op Integration Seminar 1	
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Criminal Justice Courses

Code	Title	Hours
<b>Criminal Justice Required Courses</b>		
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	Analyzing and Using Data on Crime and Justice	4
<b>Criminal Justice Required Capstone</b>		
CRIM 4949	Senior Capstone Seminar	4
<b>Thematic Elective</b>		
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	
<b>Survey Elective</b>		
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 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	
<b>System-Wide Elective</b>		
Complete one course from the following:		4
CRIM 4010	Gender, Crime, and Justice	
CRIM 4020	Race, Crime, and Justice	
<b>Criminal Justice Elective</b>		
Complete one additional CRIM elective.		4
<b>Integrative Course Requirement</b>		
Code	Title	Hours
Complete one course from the following:		4
CRIM 4040	Crime Prevention	
CRIM 4630	Political Crime and Terrorism	
CRIM 4900	Advanced Seminar in Criminology and Criminal Justice	

### Supporting Course

Code	Title	Hours
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, 2 Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 1800 and CS 1802	5	IS 2000	4	CS 3500	4		
CS 2500 and CS 2501	5	CRIM 2100	4				
CRIM 1100	4	CRIM 2200	4				
ENGW 1111	4						
		19			17		
						8	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210 or CRIM 2000	1	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
CS 3000	4					Elective	4
CRIM 3600	4						
CJ thematic elective	4						
Elective	4						
		17			0		
						0	8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
CRIM 3700	4					Elective	4
CJ survey elective	4						
Khoury elective 2	4						
THTR 1170	1						
		17			0		
						0	8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 3	4	Khoury elective 4	4	Elective	4		
CJ system- wide elective	4	CRIM 4949	4	Elective	4		
CJ elective	4	Elective	4				
Computing and social issues	4	CJ integrative course	4				
		16			16		
						8	
Total Hours: 134							

**Five Years, 3 Co-ops in Spring/Summer 1****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	IS 2000	4				
CS 2500 and CS 2501	5	CRIM 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, 3308, or 3315	4
Khoury 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
Khoury elective 2	4	Co-op		Co-op		Elective	4
CJ system- wide elective	4					Elective	4
Elective	4						
Computing and social issues	4						
	16		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
CJ integrative course	4	Khoury elective 4	4
CJ elective	4	CRIM 4949	4
Elective	4	Elective	4

Khoury elective 3	4	Elective	4
	16		16

Total Hours: 134

**Computer Science and Design, BS**

The combined major in computer science and design integrates fundamental design courses with a strong programming foundation. Students will declare a concentration in interaction design, graphic and information design, or experience design. Students in this major often have an interest in human-centered design methods used in developing digital interfaces and applications.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210 or EEAM 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Computer Science Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 8

CS 2500 or higher, except CS 5010
CY 2000 or higher, except CY 4930
DS 2500 or higher, except DS 4900
IS 2000 or higher, except IS 4900

**Design Requirements**

Code	Title	Hours
<b>Art + Design Fundamentals Required</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4

<b>Art + Design Fundamentals Elective</b>		
Complete one of the following:		
ARTF 1121	Conceptual Drawing	4-5
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	

<b>Design Required</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

<b>Design Elective</b>		
Complete any one ARTG design elective course, as long as prerequisites have been met.		

<b>Art + Design History Elective</b>		
Complete any one ARTH course.		

<b>Art + Design Elective</b>		
Complete any one ARTG, ARTE, ARTD, ARTH, ARTS, or GAME course as long as prerequisites have been met.		

<b>Degree Capstone Project</b>		
ARTG 4550	Design Degree Project 1	4

**Design Options**

Code	Title	Hours
Complete one of the following options:		
8		

<b>Interaction Design Option</b>		
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3700	Interaction Design 2: Mobile	

Code	Title	Hours
<b>Graphic and Information Design Option</b>		
ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

Code	Title	Hours
<b>Experience Design Option</b>		
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Degree-Focused Electives**

Code	Title	Hours
Complete two courses from the following lists:		8

*Art + Design*

Complete any ARTG or ARTE courses as long as prerequisites have been met.

*Psychology*

PSYC 1101	Foundations of Psychology	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	

*Computer Science*

CS 3200	Database Design	
CS 3520	Programming in C++	
CS 3540	Game Programming	
CS 3650	Computer Systems	
CS 3700	Networks and Distributed Systems	
CS 3800	Theory of Computation	
CS 4100	Artificial Intelligence	
CS 4150	Game Artificial Intelligence	
CS 4300	Computer Graphics	
CS 4400	Programming Languages	
CS 4520	Mobile Application Development	
CS 4550	Web Development	
CS 4850	Building Game Engines	
IS 2000	Principles of Information Science	
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
DS 4420	Machine Learning and Data Mining 2	
CS 4991	Research	
CS 4992	Directed Study	
CS 4993	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 4550	Design Degree Project 1	

**Supporting Course**

Code	Title	Hours
<b>Computing and Social Issues</b>		

Complete one of the following:

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	4
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	

INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

### Computer Science and Design Major Credit Requirement

96 SH are required in the major.

### Program Requirement

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
CS 1200 or ARTF 1000	1	CS 2510 and CS 2511	5	Vacation		Vacation

CS 1800 and CS 1802	5	ARTG 1250	4			
CS 2500 and CS 2501	5	A+D Fundamentals elective	4			
ARTF 1122 (with optional ARTF 1123)	4	Elective	4			
ENGW 1111	4					
		19	17	0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op 1		Co-op 1		Elective	4
CS 3500	4					Elective	4
ARTG 2250 (with optional ARTG 2251)	4						
Design option 1	4						
CS 1210 or EEAM 2000	1						
		17	0	0		0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	Co-op 2		Co-op 2		ENGW 3302 or 3315	4
THTR 1170	1					Elective	4
ARTG 3350	4						
Art + Design History Elective	4						
Design option 2	4						
		17	0	0		0	8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3451	4	Co-op 3		Co-op 3			
Computing and social issues elective	4						
Degree-focused elective 1	4						
Art + Design elective	4						
		16	0	0		0	

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4500 (and CS 4501)	4	CS elective	4				
ARTG 4550	4	Degree-focused elective 2	4				
CS elective	4	Elective	4				

Elective	4	Elective	4
16		16	

Total Hours: 134

\* Indicates course must be taken in the semester listed.

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

Year 1	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
	CS 1200 or ARTF 1000	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
	CS 1800 and CS 1802	5	ARTG 1250	4	CS 3000	4		
	CS 2500 and CS 2501	5	A+D fundamentals elective	4				
	ARTF 1122 (with optional ARTF 1123)	4	Elective	4				
	ENGW 1111	4						
	19		17		8		0	

Year 2	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
	ARTG 2250 (with optional ARTG 2251)	4	Co-op 1	Co-op 1	ENGW 3302	4		
	Art + Design History Elective	4			Elective	4		
	Design option 1	4						
	Degree-focused elective 1	4						
	CS 1210 or EEAM 2000	1						
	17		0		0		8	

Year 3	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
	IS 4300	4	Co-op 2	Co-op 2	Elective	4		
	THTR 1170	1			Elective	4		
	ARTG 3350	4						
	Computing and social issues	4						
	Design option 2	4						
	17		0		0		8	

Year 4	Fall	Hours	Spring	Hours	Summer 1	Hours
	CS 4500 (and CS 4501)	4	Degree-focused elective 2	4	Elective	4
	ARTG 3451	4	Art + Design elective	4	Elective	4
	ARTG 4550	4	CS elective	4		

Elective	4	CS elective	4
16		16	
		8	

Total Hours: 134

## Computer Science and Economics, BS

The combined major in computer science and economics integrates fundamental economics courses with a strong programming foundation. Studying both the behavior of individuals and the collective behavior of industries and governments, students will utilize computing skills to address complex issues within the field.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4
Choose one		4
IS 4200	Information Retrieval	
IS 4300	Human Computer Interaction	
IS 4700	Social Information Systems	

### Presentation Requirement



THTR 1170	The Eloquent Presenter	1
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**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
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CS 2500 or higher, except CS 5010
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CY 2000 or higher, except CY 4930
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DS 2500 or higher, except DS 4900
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IS 2000 or higher, except IS 4900
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**Economics Requirements**

Code	Title	Hours
<b>Required Economics Courses</b>		

ECON 1115	Principles of Macroeconomics	4
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ECON 1116	Principles of Microeconomics	4
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ECON 2315	Macroeconomic Theory	4
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ECON 2316	Microeconomic Theory	4
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ECON 2350	Statistics	4
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ECON 2560	Applied Econometrics	4
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**Economics Electives**

Complete 4 Economics elective courses from the following ranges with no more than 2 at the ECON 1200 – ECON 1999 range:	16
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ECON 1200 to ECON 1999
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ECON 3000 to ECON 4689
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ECON 4900 to ECON 4999
------------------------

ECON 5200 to ECON 5999
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**Economics Capstone**

ECON 4692	Senior Economics Seminar	4
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**Integrative Course Requirement**

Code	Title	Hours
The following courses are used in other areas of the major:		

IS 2000	Principles of Information Science	4
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ECON 2560	Applied Econometrics	4
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**Supporting Courses**

Code	Title	Hours
<b>Mathematics</b>		

MATH 1231	Calculus for Business and Economics	4
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or MATH 1341	Calculus 1 for Science and Engineering	
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<b>Computing and Social Issues</b>		
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Complete one of the following:	4
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ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
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CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
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ENGL 2150	Literature and Digital Diversity	
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HIST 2220	History of Technology	
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INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
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IS 1300	Knowledge in a Digital World	
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or PHIL 1300	Knowledge in a Digital World	
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PHIL 1145	Technology and Human Values	
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SOCL 1280	The Twenty-First-Century Workplace
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SOCL 3485	Environment, Technology, and Society
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SOCL 4528	Computers and Society
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**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		

ENGW 1111	First-Year Writing	4
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or ENGW 1102	First-Year Writing for Multilingual Writers	
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<b>Advanced Writing in the Disciplines</b>		
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Complete one course from the following:	4
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ENGW 3302	Advanced Writing in the Technical Professions	
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ENGW 3308	Advanced Writing in the Social Sciences	
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ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
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**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		

24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Economics GPA Requirement**

Grades in the following required Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4

ECON 2316	Microeconomic Theory	4
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ECON 2350	Statistics	4
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ECON 2560	Applied Econometrics	4
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**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Computer Science and Economics Major Credit Requirement**

Minimum of 100 SH is required in the major.

## Program Requirement

134 total semester hours required

## Plan of Study

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3200	4	Elective	4
CS 1800 and CS 1802	5	IS 2000	4	CS 3500	4	Elective	4
CS 2500 and CS 2501	5	ECON 1116	4				
ECON 1115	4	MATH 1231 or 1341	4				
ENGW 1111	4						
	19		17		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 2800 and CS 2801	5	CS 1210	1	Elective	4	Co-op	
CS 3000	4	Khoury Elective	4	Elective	4		
ECON 2315	4	ECON 2316	4				
ECON 2350	4	ECON elective 1	4				
		Elective	4				
	17		17		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury Elective	4	ENGW 3302	4	Co-op	
		ECON elective 2	4	Elective	4		
		Computing and social issues requirement	4				
		ECON 2560	4				
		THTR 1170	1				
	0		17		8		0

#### Year 4

Fall	Hours	Spring	Hours
Co-op		CS elective 3	4
		ECON 4692	4
		ECON elective 3	4
		ECON elective 4	4
	0		16

Total Hours: 135

## Computer Science and English, BS

The computer science and English combined major focuses on the increasingly interdisciplinary processes of creating, interpreting, and

analyzing texts and programs. Students will combine communication and critical judgment, gaining the creativity and adaptability necessary to utilize technology in literary studies, and apply humanities skills to solve programming problems.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Computing Focus</b>		
Students are required to complete one of the following foci (two courses total):		8
<i>Focus 1: Natural Language Processing</i>		
CS 3800	Theory of Computation	
CS 4120	Natural Language Processing	
<i>Focus 2: Programming Languages</i>		
CS 3800	Theory of Computation	
CS 4400	Programming Languages	
<i>Focus 3: Analytics</i>		
DS 3000	Foundations of Data Science	
DS 4200	Information Presentation and Visualization	
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1

## Computer Science/Information Science Elective Course

Choose one:		
IS 2000	Principles of Information Science	4
CS 4500	Software Development	4
or CS 4530	Fundamentals of Software Engineering	

**Khoury Elective Courses**

With adviser approval, a directed study, project study, or appropriate graduate-level course may also be taken as an upper-division elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
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ENGL 1160	Introduction to Rhetoric	4
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or ENGL 1410	Introduction to Writing Studies	
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**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	
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ENGL 2296	Early African-American Literature	
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ENGL 2450	Postcolonial Literature	
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ENGL 2451	Postcolonial Women Writers	
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ENGL 2455	American Women Writers Race	
-----------	-----------------------------	--

ENGL 2460	Multiethnic Literatures of the U.S.	
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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	
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**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare	
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ENGL 1700	Global Literature to 1500	
-----------	---------------------------	--

ENGL 2240	17th-Century British Literature	
-----------	---------------------------------	--

ENGL 2296	Early African-American Literature	
-----------	-----------------------------------	--

ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
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ENGL 4000	Topics in Early Literatures	
-----------	-----------------------------	--

ENGL 4020	Topics in 17th- and 18th-Century Literatures	
-----------	--	--

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance
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ENGL 3720	19th-Century Major Figure
-----------	---------------------------

ENGL 4040	Topics in 19th-Century Literatures
-----------	------------------------------------

ENGL 2301	The Graphic Novel
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ENGL 2440	The Modern Bestseller
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ENGL 2600	Irish Literary Culture (Abroad)
-----------	---------------------------------

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
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ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
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ENGL 3730	20th- and 21st-Century Major Figure
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**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
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ENGL 1160	Introduction to Rhetoric
-----------	--------------------------

ENGL 1410	Introduction to Writing Studies
-----------	---------------------------------

ENGL 2150	Literature and Digital Diversity
-----------	----------------------------------

ENGL 3325	Rhetoric of Law
-----------	-----------------

ENGL 3340	Technologies of Text
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ENGL 3370	Writing Cultures
-----------	------------------

ENGL 3381	The Practice and Theory of Teaching Writing
-----------	---

ENGL 3700	Narrative Medicine
-----------	--------------------

ENGL 4400	Opening the Archive
-----------	---------------------

ENGL 4410	Research in Rhetoric and Writing
-----------	----------------------------------

LING 1150	Introduction to Language and Linguistics
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LING 2350	Linguistic Analysis
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LING 3450	Syntax
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LING 3452	Semantics
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LING 3454	History of English
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LING 3456	Language and Gender
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LING 3458	Topics in Linguistics
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**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age
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ENGL 1502	American Literature to 1865
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ENGL 1503	American Literature 1865 to Present
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ENGL 2150	Literature and Digital Diversity
-----------	----------------------------------

ENGL 2380	The Modern Novel
-----------	------------------

ENGL 2420	Contemporary Poetry
-----------	---------------------

ENGL 2430	Contemporary Fiction
-----------	----------------------

ENGL 2450	Postcolonial Literature
-----------	-------------------------

ENGL 2451	Postcolonial Women Writers
-----------	----------------------------

ENGL 2455	American Women Writers Race
-----------	-----------------------------

ENGL 2460	Multiethnic Literatures of the U.S.
-----------	-------------------------------------

ENGL 2510	Horror Fiction
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ENGL 2520	Science Fiction
-----------	-----------------

ENGL 2600	Irish Literary Culture (Abroad)
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ENGL 2620	What Is Nature? (Abroad)
-----------	--------------------------

ENGL 2690	Boston in Literature
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ENGL 3487	Film and Text (Abroad)
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ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following:	4
ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	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
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**Integrative Course Requirement**

This course will not be allowed to double-count in the Theories and Methods section above.

Code	Title	Hours
ENGL 3340	Technologies of Text	4

**Supporting Course**

Code	Title	Hours
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
ENGL 1111	First-Year Writing	4

or ENGL 1102	First-Year Writing for Multilingual Writers
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**Advanced Writing in the Disciplines**

Complete one course from the following:	
ENGW 3302	Advanced Writing in the Technical Professions
ENGW 3309	Advanced Writing in the Humanities
ENGW 3310	Advanced Writing in Literature
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

132 total semester hours required

**Plan of Study**

**Sample Patterns:**

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

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4
CS 1800 and CS 1802	5	ENGL 1160 or 1410	4	Elective	4
CS 2500 and CS 2501	5	Elective	4		
ENGL 1400	4	English literary period 1	4		
ENGW 1111	4				
19		17		8	
				0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Strand elective 1	4	ENGW 3302, 3309, 3310, or 3315	4	Co-op	
CS 3200	4	CS 1210	1	Elective	4		
English literary period 2	4	IS 2000 (or English Category or Elective)	4				
English category or elective	4	English category or elective	4				
		ENGL 3340	4				
		16			17		
						8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Strand elective 2	4	Elective	4	Co-op	
		English category or elective	4	Elective	4		
		English category or elective	4				
		Computing and social issues	4				
		THTR 1170	1				
		0			17		
						8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	
Co-op		CS 4500 (or English Category or Elective)	4	Elective	4	
		ENGL 4710 or 4720	4	Elective	4	
		Khoury elective	4			
		Elective	4			
		0			16	
						8

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	ENGL 1160 or 1410	4				
CS 2500 and CS 2501	5	Elective	4				
ENGW 1111	4	English literary period 1	4				
ENGL 1400	4						
		19			17		
						0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 3200	4	Vacation		Co-op	
CS 3500	4	CS 1210	1				
English literary period 2	4	IS 2000 (or English Category or Elective)	4				
English category or elective	4	English category or elective	4				
		ENGL 3340	4				
		16			17		
						0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Strand elective 1	4	ENGW 3302, 3309, 3310, or 3315	4	Co-op	
		English category or elective	4	Elective	4		
		English category or elective	4				
		THTR 1170	1				
		Elective	4				
		0			17		
						8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Strand elective 2	4	Elective	4	Co-op	
		Computing and social issues	4	Elective	4		
		Elective	4				
		Elective	4				
		0			16		
						8	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		CS 4500 (or English Category or Elective)	4
		ENGL 4710 or 4720	4
		Khoury elective	4
		Elective	4
		0	16

Total Hours: 134

**Computer Science and Environmental 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. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		
With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.		
Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## Environmental Science Courses

Code	Title	Hours
<b>Environmental Science Required Courses</b>		
ENVR 1101	Environmental Science	4
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	5
ENVR 5210	Environmental Planning	4

ENVR 4900	Earth and Environmental Science Capstone	1
or ENVR 4997	Senior Thesis	
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	
<b>Environmental Science Integrative Courses</b>		
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	
<b>Environmental Science Electives</b>		
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 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 4504	Environmental Pollution	
ENVR 5190	Soil Science	
ENVR 5201	Geologic Field Seminar	
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	
<b>Supporting Courses</b>		
Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
MATH 1252	Calculus and Differential Equations for Biology 2	4
or MATH 1342	Calculus 2 for Science and Engineering	
MATH 3081	Probability and Statistics	4
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	



INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300 or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

CS 1200	1	ENVR 1203 or 2311	1	Elective	4
CS 1800 and CS 1802	5	CS 3200	4		
CS 2500 and CS 2501	5	Elective	4		
ENGW 1111	4	ENVR 1200	4		
				19	18
				8	0

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 5210	4	CHEM 1214 and CHEM 1215 and CHEM 1216	5	MATH 1252 or 1342	4	Co-op	
CHEM 1211 and CHEM 1212 and CHEM 1213	5	MATH 1251 or 1341	4	Elective	4		
CS 3000	4	ENVR elective	4				
ENVR 1202	4	Khoury elective	4				
		CS 1210	1				
				17	18	8	0

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
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

### 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

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENVR 1101	4	CS 2510 and CS 2511	5	CS 3500	4	Vacation

### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		CS 4500	4	Elective	4
		ENVR 4900 (or ENVR 4997 (if short of credit hours))	1	Elective	4
		ENVR integrative	4		
		ENVR elective	4		
		Computing and social issues	4		
				0	17
				8	

Total Hours: 138

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	Elective	4				
ENGW 1111	4	ENVR 1202 or 2310	4				
ENVR 1101	4	ENVR 1203 or 2311	1				
		19	18	0	0		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CHEM 1214 and CHEM 1215 and CHEM 1216	5	Vacation	0	Co-op	0
CHEM 1211 and CHEM 1212 and CHEM 1213	5	CS 3000	4				
ENVR 5210	4	ENVR elective	4				
ENVR 1200	4	CS 1210	1				
		Khoury elective	4				
		17	18	0	0		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MATH 1251 or 1341	4	MATH 3081	4	Co-op	0
		ENVR integrative (take lab if offered)	4	Elective	4		
		ENVR elective	4				
		THTR 1170	1				
		Elective	4				
		0	17	8	0		

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	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500	4				

ENVR 4900 (ENVR 4997 (if short of credit 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. 46).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ARTF 1000	First Year Seminar Art and Design at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
or EEAM 2000	Professional Development for Co-op	
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	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
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
CS 4850	Building Game Engines (Integrative course)	4

**Computer Science Elective Course**

CS 4150	Game Artificial Intelligence (Integrative course)	4
or IS 4300	Human Computer Interaction	

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Game Design Courses**

Code	Title	Hours
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**Game Design Required**

GAME 1110	Games and Society	4
GAME 2500	Foundations of Game Design	4
GAME 2950	Game Studio	4
GAME 3400	Level Design and Game Architecture	4
GAME 3700	Rapid Idea Prototyping for Games	4
GAME 3800	Game Concept Development and Production	4
GAME 4700	Game Design Capstone	4

**Game Design Elective**

GAME 1850	Experimental Game Design	4
or GAME 3300	Game Interface Design	

**Khoury/Game-Related Electives**

Complete three courses from the following: 12

Any course in ARTD, ARTE, ARTF, ARTG, ARTH, and GAME subject areas as long as prerequisites have been met.

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

MATH 1342 Calculus 2 for Science and Engineering

ECON 2350 Statistics

or PSYC 2320 Statistics in Psychological Research

**Supporting Courses**

Code	Title	Hours
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**Psychology**

PSYC 1101	Foundations of Psychology	4
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**Mathematics**

Complete two courses from Math department or the following:

MATH 1260	Math Fundamentals for Games (Integrative course)	4
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MATH 1341	Calculus 1 for Science and Engineering	4
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**Computer Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

Students are strongly encouraged to take Advanced Writing in the Technical Professions (ENGW 3302) but may substitute Interdisciplinary Advanced Writing in the Disciplines (ENGW 3315).

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 12 credits of general electives.		12

**Khoury College GPA Requirements**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills through Experience is satisfied through co-op.*

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Pattern, Four Years, Two Co-ops****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200 or ARTF 1000	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	MATH 1260	4	MATH 1341	4		
CS 2500 and CS 2501	5	GAME 2500	4				
ENGW 1111	4	Elective	4				
GAME 1110	4						
		19		17		8	
						0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3520 (*)	4	CS 1210 or EEAM 2000	1	Elective	4	Co-op	
CS 3000	4	CS 3540 (*)	4	Elective	4		
GAME 2950	4	CS 3650	4				

GAME 3400	4	GAME 3700	4
		Khoury/ game elective	4
16		17	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4850 (*)	4	Co-op	0	Co-op	0
		CS 4300	4				
		ENGW 3302	4				
		PSYC 1101	4				
		THTR 1170	1				
0		17		0		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 2	Hours
CS 3700	4	GAME 4700	4	Vacation	0
CS 4500	4	Computer science elective	4		
GAME 3800	4	Khoury/ game elective	4		
Khoury/ game elective	4	Game Design Elective	4		
16		16		0	

Total Hours: 134

\*Indicates courses that must be taken in the semester listed.

## Computer Science and 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Computer Science Courses

Code	Title	Hours
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### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective Courses

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## History Courses

Code	Title	Hours
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### 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 introductory course from the following:

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

Intermediate/Advanced History Cluster 12

Complete three HIST courses numbered 2303 or above. Cluster is subject to Department approval.

Complete one advanced-level course: 4

Select from any HIST course numbered 3000 or above.

**History Capstone Seminar or Senior Project**

Complete one capstone experience from the following: 4

HIST 4701 Capstone Seminar

Public history concentrators may also select from the following:

HIST 4903 Fieldwork in History 1

**Integrative Course Requirement**

Code	Title	Hours
HIST 2211	The World Since 1945	4

**Supporting Courses**

Code	Title	Hours
<b>Research Methods</b>		
Complete one course 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 of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

This requirement is satisfied by HIST 2302 taken in conjunction with HIST 2301.

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Computer Science and History GPA/Credit Requirement**

Complete 98 semester hours in the major with a minimum 2.000 GPA

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Writing-Intensive in the Major
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

135 total semester hours required

**Plan of Study**

**Sample Patterns:**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	IS 2000	4	Elective	4		
CS 2500 and CS 2501	5	CS 3200	4				
ENGW 1111	4	Introductory history elective	4				
HIST 1200	1						
HIST 1201	4						
	20		17		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 1210	1	Elective	4	Co-op	
HIST 2301	4	Elective	4	Elective	4		
HIST 2302	1	Khoury elective 1	4				
History Pre-1800 elective	4	Intermediate history elective 1	4				
Research methods requirement	4	Intermediate history elective 2	4				
		17	17		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 2	4	Elective	4	Co-op	
		Intermediate history elective 3	4	Elective	4		
		Advanced history elective	4				
		Computing and social issues	4				
		THTR 1170	1				
		0	17		8		0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		Khoury elective 3	4	Elective	4
		History capstone seminar or senior project	4	Elective	4
		History integrative requirement	4		
		Khoury elective 4	4		
		0	16		8

Total Hours: 136

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	5	Vacation	5
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	IS 2000	4				
ENGW 1111	4	Introductory history elective	4				
HIST 1200	1						

HIST 1201	4						
		20	17	0	0		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op	4	Co-op	4	Vacation	4
CS 3000	4						
CS 3500	4						
HIST 2301	4						
HIST 2302	1						
Research methods requirement	4						
		18	0	0	0	0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
History Pre-1800 elective	4	Co-op	4	Co-op	4	Elective	4
Intermediate history elective 1	4					Elective	4
Elective	4						
Khoury elective 1	4						
THTR 1170	1						
		17	0	0	0	8	8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 2	4	Co-op	4	Co-op	4	Elective	4
Intermediate history elective 2	4					Elective	4
Computing and social issues	4						
Elective	4						
		16	0	0	0	8	8

Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
Khoury elective 3	4	Khoury elective 4	4		
Intermediate history elective 3	4	Advanced history elective	4		
Elective	4	History capstone seminar or senior project	4		
Elective	4	History integrative requirement	4		
		16	16		

Total Hours: 136



## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4200 or IS 4300	Information Retrieval Human Computer Interaction	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 12 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		12
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
<b>Journalism Courses</b>		
A grade of C or higher is required:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

#### Required Journalism

JRNL 1150	Understanding Today's News	4
JRNL 2350	The History of Journalism: How the News Became the News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

#### Journalism Electives

Complete two JRNL courses. 8

#### Journalism-Related Requirement

HIST 1130	Introduction to the History of the United States	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4

#### Computing and Social Issues

Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	
SOCL 3485	Environment, Technology, and Society	

### Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4

**Advanced Writing in the Disciplines**

*This course already fulfills a Journalism requirement above*

JRNL 2301 Visual Storytelling in Journalism

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Interpreting Culture
- Engaging Difference and Diversity
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

**Journalism GPA Requirement**

Minimum 2.000 GPA required in all JRNL courses

**Program Requirement**

134 total semester hours required

**Plan of Study**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4		
CS 2500 and CS 2501	5	JRNL 2201	4				
JRNL 1101 and JRNL 1102	5	ENGW 1111	4				
JRNL 1150	4						
20		17		8		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210	1	Co-op		Co-op		Elective	4
CS 3000	4					Elective	4
Khoury elective	4						
JRNL 2350	4						

HIST 1130	4						
17		0		0		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective	4	Co-op		Co-op		Elective	4
Khoury elective	4					Elective	4
JRNL 2301	4						
Journalism elective 1	4						
THTR 1170	1						
17		0		0		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4500 and CS 4501	4	JRNL 4650	4	Elective	4		
JRNL 3610	4	Computing and social issues	4	Elective	4		
JRNL 3550	4	Journalism elective 2	4				
IS 4200	4	Elective	4				
16		16		8		0	

Total Hours: 135

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	JRNL 2201	4				
JRNL 1101 and JRNL 1102	5	ENGW 1111	4				
JRNL 1150	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	0
CS 3500	4						
MATH 1341	4						
JRNL 2350	4						
HIST 1130	4						
17		0		0		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op		Co-op		Elective	4
Khoury elective	4					Elective	4
JRNL 2301	4						

Journalism elective 1	4						
THTR 1170	1						
	17		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Khoury elective	4	Co-op	0	Co-op	0	Elective	4
JRNL 3550	4					Elective	4
JRNL 3610	4						
Elective	4						
	16		0		0		8
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Khoury elective	4	CS 4000	1				
JRNL 4650	4	CS 4500 and CS 4501	4				
IS 4200	4	Computing and social issues	4				
Journalism elective 2	4	Elective	4				
		Elective	4				
	16		17				

Total Hours: 136

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	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
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 4 credits of CS, CY, DS, or IS courses that are not already required. Choose courses within the following range:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Linguistics Requirements</b>		
Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis (Integrative course)	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4

PSYC 3464 Psychology of Language 4

**Laboratory/Directed Study**

Complete one of the following: 4

LING 4891 Research Seminar in Linguistics

LING 4991 Directed Study Research

PSYC 4610 Laboratory in Psycholinguistics

**Seminar Requirement**

LING 4654 Seminar in Linguistics 4

or PSYC 4658 Seminar in Psycholinguistics

**Linguistics Elective**

Complete one LING course, not counted elsewhere, numbered 3000-4799, or one of the following: 4

DEAF 2700 ASL Linguistics

PSYC 3466 Cognition

PSYC 4520 Language and the Brain

PSYC 4522 Psychology of Reading

PSYC 4524 Cognitive Development

PSYC 4610 Laboratory in Psycholinguistics

PSYC 4658 Seminar in Psycholinguistics

PSYC 4660 Seminar in Cognition

PSYC 4674 Seminar in Cognitive Neuroscience

With prior approval, directed study research, independent study, and Honors Project courses can also be counted:

LING 4891 Research Seminar in Linguistics

LING 4970 Junior/Senior Honors Project 1

LING 4971 Junior/Senior Honors Project 2

LING 4991 Directed Study Research

PSYC 4991 Directed Study Research

**Supporting Courses**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**Mathematics Requirement**

MATH 1341	Calculus 1 for Science and Engineering	4
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**Computing and Social Issues**

Complete one of the following: 4

ANTH 3418 Wired/Unwired: Cybercultures and Technopolitics

CY 5240 Cyberlaw: Privacy, Ethics, and Digital Rights

HIST 2220 History of Technology

ENGL 2150 Literature and Digital Diversity

INSH 2102 Bostonography: The City through Data, Texts, Maps, and Networks

IS 1300 Knowledge in a Digital World  
or PHIL 1300 Knowledge in a Digital World

PHIL 1145 Technology and Human Values

SOCL 1280 The Twenty-First-Century Workplace

SOCL 3485 Environment, Technology, and Society

SOCL 4528 Computers and Society

**Computer Science Writing Requirement**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
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**College Writing**

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

**Required General Electives**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
Complete 20 credits of general electives		20

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUPath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Difference and Diversity
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, One Co-op in Summer 2/Fall**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	Vacation	
CS 1800 and CS 1802	5	LING 2350	4			
CS 2500 and CS 2501	5	Elective	4			
LING 1150	4	PSYC 1101	4			
ENGW 1111	4					
		19		17		0
						0

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours Summer 2	Hours
CS 3500	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	Linguistic structure	4		
		PSYC 2320	4		
	16		17		8
					0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4120	4	Elective	4	Vacation	
		CS 4400	4	Elective	4		
		Linguistic structure	4				
		ENGW 3302	4				
		THTR 1170	1				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours
CS 4500 or 4530	4	CS 4100	4
Linguistic structure	4	Khoury elective	4
LING 4654 or PSYC 4658	4	LING elective	4
Computing and social issues	4	LING lab (or directed study)	4
	16		16

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	LING 2350	4				
CS 1800 and CS 1802	5	PSYC 1101	4				
LING 1150	4	Elective	4				
ENGW 1111	4						
	19		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	Vacation	0	Co-op	0
MATH 1341	4	CS 3000	4				
LING 3412	4	CS 3800	4				
PSYC 3464	4	Linguistic structure	4				
		PSYC 2320	4				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4120	4	Elective	4	Co-op	0
		CS 4400	4	Elective	4		

		Linguistic structure	4
		ENGW 3302	4
		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
		Khoury elective	4	Elective	4		
		Linguistic structure	4				
		LING lab (or directed study)	4				
	0	16	8				0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CS 4500 or 4530	4
		LING 4654 or PSYC 4658	4
		LING elective	4
		Computing and social issues	4
	0	16	

Total Hours: 134

**Computer Science and Mathematics, BS**

The computer science and mathematics combined major was the first dual major created by the college. The mathematics requirements focus on courses that have computing applications or form the basis for further studies in mathematical theory. The program emphasizes the strong ties between computer science and mathematics that date back to the origins of machine computation in the 1930s and 1940s—and persist to this day.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1

CS 1210	Professional Development for Khoury Co-op	1
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**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4300	Computer Graphics (Integrative course) <sup>1</sup>	4

CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
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**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete eight credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

- CS 2500 or higher, except CS 5010
- CY 2000 or higher, except CY 4930
- DS 2500 or higher, except DS 4900
- IS 2000 or higher, except IS 4900

<sup>1</sup> CS 4300 satisfies the capstone requirement.

**Mathematics Courses**

Code	Title	Hours
<b>Calculus Courses</b>		
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 2321	Calculus 3 for Science and Engineering	4

**Mathematics Courses**

MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4

**Mathematics Electives**

Complete three courses in the following range: 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	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required



### Plan of Study

#### Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Elective	4	Vacation	0
CS 1800 and CS 1802	5	CS 2800 and CS 2801	5	MATH 2321	4		
CS 2500 and CS 2501	5	MATH 1342	4				
MATH 1341	4	Elective	4				
ENGW 1111	4						
19		18		8		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	Elective	4	Co-op	0
MATH 2331	4	CS 3000	4	MATH 3081	4		
MATH 2341	4	Khoury elective	4				
CS 3800	4	MATH 3527	4				
		MATH elective	4				
16		17		8		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Math elective	4	Elective	4	Co-op	0
		CS 4300	4	Elective	4		
		ENGW 3302	4				
		MATH 3175	4				
		THTR 1170	1				
0		17		8		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500	4	Elective	4		
		Khoury elective	4	Elective	4		
		Math elective	4				
		Computing and social issues	4				
0		16		8		0	

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 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 2800 and CS 2801	5				
MATH 1341	4	MATH 1342	4				
ENGW 1111	4	Elective	4				
19		18		0		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 3000	4	Vacation	0	Co-op	0
MATH 2321	4	MATH 2331	4				
MATH 2341	4	MATH 3081	4				
Elective	4	CS 1210	1				
		Elective	4				
16		17		0		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	Elective	4	Co-op	0
		CS 4300	4	Elective	4		
		MATH 3175	4				
		ENGW 3302	4				
		THTR 1170	1				
0		17		8		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500	4	Elective	4	Co-op	0
		MATH 3527	4	Elective	4		
		MATH elective	4				
		Khoury elective	4				
0		16		8		0	

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective	4				
		Computing and social issues	4				
		MATH elective	4				
		MATH elective	4				
0		16		0		0	

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 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 2800 and CS 2801	5				
MATH 1341	4	MATH 1342	4				
ENGW 1111	4	Elective	4				
CS 1200	1						
19		18		0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	Co-op	0	Co-op	0	Vacation	0
MATH 2321	4						
MATH 2341	4						
CS 1210	1						
Elective	4						
	17		0		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op	0	Co-op	0	Elective	4
MATH 2331	4					Elective	4
MATH 3081	4						
Elective	4						
THTR 1170	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3800	4	Co-op	0	Co-op	0	Elective	4
CS 4300	4					Elective	4
MATH 3527	4						
ENGW 3302	4						
	16		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
CS 4500	4	Khoury elective	4
MATH 3175	4	Computing and social issues	4
MATH elective	4	MATH elective	4
Khoury elective	4	MATH elective	4
	16		16

Total Hours: 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 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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
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**Computer Science Overview**

CS 1200	First Year Seminar	1
or ARTF 1000	Art and Design at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
or EEAM 2000	Professional Development for Co-op	

**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4300	Computer Graphics	4
CS 4500	Software Development	4
or CS 4530	Fundamentals of Software Engineering	
IS 4300	Human Computer Interaction	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

**Computer Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Media Arts Courses**

Code	Title	Hours
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**Required Media Arts Courses**

ARTD 2100	Narrative Basics	4
ARTF 1120	Observational Drawing	4

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	5
ARTF 2220	Movement and Time (with optional ARTF 2221)	4
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	4

**Media Arts Electives**

Complete any six courses as long as prerequisites have been met. At least two must be a 3000-level course. 24

*Basics*

ARTD 2360	Introduction to Photography	
ARTD 2370	Animation Basics	
ARTD 2380	Video Basics	

*Photography*

ARTD 3460	Photography: Concept + Process	
ARTD 4565	Photography: Visual Strategies + Context	
ARTD 4660	Studio Photography	
ARTD 4661	Photography: Experimental Processes	

*Animation*

ARTD 3470	Animation 1	
ARTD 3471	Virtual Environment Design	
ARTD 3472	Character Design for Animation	
ARTD 3473	Animation for Games	
ARTD 4570	Animation 2	
ARTD 4575	Animation 3	
ARTD 4577	Digital Sculpture and Model Making	

*Video*

ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
ARTD 5582	Collaborative Video and Community Engagement	

*History*

ARTH 2212	Survey of the Still and Moving Image	
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**Media Arts Capstone**

ARTD 4530	Media Arts Degree Project 1	4
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**Supporting Courses**

Code	Title	Hours
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**Mathematics Requirement**

MATH 2331	Linear Algebra	4
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**Computing and Social Issues**

Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	

PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Integrative Courses**

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

CS 4300	Computer Graphics	
IS 4300	Human Computer Interaction	

**Required General Electives**

Code	Title	Hours
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Complete 20 credits of general electives. 20

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Integrating Knowledge and Skills Through Experience
- Demonstrating Thought and Action in a Capstone

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

131 total semester hours required

**Plan of Study****Sample Pattern, Four Years, Two Co-ops in Spring/Summer 1****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510	4	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	CS 2511	1	ARTF 1120	4		
CS 2500	4	CS 3200	4				
CS 2501	1	ARTF 1122 (with optional ARTF 1123)	4				
ARTF 1124 and ARTF 1125	5	ARTF 2223 (with optional ARTF 2224)	4				
ENGW 1111	4						
	20		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			Khoury elective	4
CS 3000	4				
ARTF 2220 (with optional 2221)	4				
ARTD 2100	4				
<hr/>					
	17		0	0	8

Year 3					
Fall	Hours	Spring	Hours Summer 1	Hours Summer 2	Hours
THTR 1170	1	Co-op	0 Co-op	0 Khoury elective	4
CS 4300	4	ENGW 3302	4	Khoury elective	4
Khoury elective	4				
Media arts elective	4				
Media arts elective	4				
<hr/>					
	17		4	0	8

Year 4			
Fall	Hours	Spring	Hours
CS 4500	4	ARTD 4530	4
Khoury elective	4	Computing and social issues	4
Media arts elective	4	Media arts elective	4
Media arts elective	4	Media arts elective	4
<hr/>			
	16		16

Total Hours: 131

\*Indicates course must be taken in the term listed.

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

Year 1					
Fall	Hours	Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5 CS 3500	4 Vacation	0
CS 1800 and CS 1802	5	CS 3200	4 Elective	4	
CS 2500 and CS 2501	5	ARTF 1120	4		
ARTF 1122 (with optional ARTF 1123)	4	ARTF 2220 (with optional ARTF 2221)	4		
ENGW 1111	4				
<hr/>					
	19		17	8	0

Year 2					
Fall	Hours	Spring	Hours Summer 1	Hours Summer 2	Hours
CS 1210	1	Co-op	Co-op	Elective	4
IS 4300	4			Elective	4
CS 3000	4				
ARTD 2100	4				
Media arts elective	4				
<hr/>					
	17		0	0	8

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				
Khoury elective	4				
ARTF 1124 and ARTF 1125	5				
ARTF 2223 (with optional ARTF 2224)	4				
<hr/>					
	18		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
Khoury elective	4	ENGW 3302	4		
Media arts elective	4				
Media arts elective	4				
<hr/>					
	16		4	0	0

Year 5			
Fall	Hours	Spring	Hours
CS 4500	4	ARTD 4530	4
Media arts elective	4	Computing and social issues	4
Media arts elective	4	Media arts elective	4
Elective	4	Elective	4
<hr/>			
	16		16

Total Hours: 139

\*Indicates course must be taken in the term listed.

### Computer Science and Music with Concentration in Music Technology, BS

The computer science and music combined major with concentration in music technology focuses on the creative application of 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
IS 4300	Human Computer Interaction (Integrative)	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS or IS classes that are not already required. Choose courses within the following ranges: 8

- CS 2500 or higher, except CS 5010
- CY 2000 or higher, except CY 4930
- DS 2500 or higher, except DS 4900
- IS 2000 or higher, except IS 4900

### Music Courses

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following:		8

MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition (Music Perception and Cognition)	
MUSC 3541	Music Analysis Seminar	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<b>Contemporary</b>		
Complete one of the following:		4
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Industry</b>		
Complete one of the following:		4
MUSI 1230	Introduction to Music Industry	
MUSI 2331	Music Recording 2	
MUSI 3335	Copyright Law for Musicians	
<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 4520	Interactive Music Programming	
MUST 4610	Composition for Electronic Instruments	
<b>Music Technology Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4

### Foundations of Psychology

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4

### Computing and Social Issues

Code	Title	Hours
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	

or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

CS 2500 and CS 2501	5 (*)	MUSC 1202	4
MUSC 1201 (*)	4	MUSC 2350	4
ENGW 1111	4		
		19	17
			8
			0

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1210	1	Co-op		Co-op		ENGW 3302
MUSC 1001	4					Elective
CS 3000	4					
Elective	4					
MUST 2431	4					
		17		0		0
						8

### Required General Electives

Code	Title	Hours
	Complete 20 credits of general electives.	20

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
MUSC 3541, 2111, or 3300	4	Co-op		0	Co-op	0
						Vacation
						0

### 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.

Contemporary music requirement*	4					
Music technology elective						
Khoury elective	4					
		12		0		0
						0

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
IS 4300	4	Co-op		0	Co-op	0
PSYC 1101	4					
THTR 1170	1					
Music technology elective*	4					
Khoury elective	4					
		17		0		0
						0

### Program Requirement

133 total semester hours required

Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 4500	4	MUST 4611 (*)		4		
MUSC 3541, 2111, or 3300	4	Elective		4		
Computing and social issues	4	Music industry elective		4		
Elective	4	Elective		4		
		16		16		

### 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
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation
						0
CS 1800 and CS 1802	5	MUST 1220 (*)	4	CS 3200	4	

Total Hours: 130

\*Indicates course must be taken in the term listed.



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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	MUST 1220 (*)	4	CS 3200	4		
CS 2500 and CS 2501	5	MUSC 1202 (*)	4				
MUSC 1201 (*)	4	MUSC 2350	4				
ENGW 1111	4						
	19		17		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						
Khoury elective	4						
MUST 2431	4						
	17		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 2111, MUSC 3541 or MUSC 3300	4	Co-op	0	Co-op	0	PSYC 1101	4
MUSC 2111, MUSC 3541 or MUSC 3300						Elective	4
Contemporary music requirement*	4						
Music technology elective*	4						
	12		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	MUST 4611 (*)	4	Elective	4		4
CS 4500	4	Elective	4	Elective	4		4
THTR 1170	1	Computing and social issues	4				
Music technology elective*	4	Music industry elective	4				
Khoury elective	4						
	17		16		8		

Total Hours: 130

\*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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective</b>		

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken for upper-division electives.

Complete 8 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Philosophy Courses

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
or PHIL 2330	Modern Philosophy	
PHIL 1145	Technology and Human Values	4
PHIL 4515	Advanced Logic	4
PHIL 5005	Information Ethics	4
or PHIL 5010	AI Ethics	

### Electives

Take four additional PHIL courses, at least one of which is 4000 or above	16
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### Integrative Course Requirement

Code	Title	Hours
These courses will double count in other areas of your major.		
CS 3800	Theory of Computation	
PHIL 4515	Advanced Logic	

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

### Advanced Writing in the Disciplines

Complete one course from the following:	4
ENGW 3302	Advanced Writing in the Technical Professions
ENGW 3309	Advanced Writing in the Humanities
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines

### Required General Electives

Code	Title	Hours
Complete 44 credits of general electives.		44

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data

- Writing-Intensive in the Major
- Interpreting Culture
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### 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
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation
CS 1800 and CS 1802	5	CS 2800 and CS 2801	5	Elective	4	
CS 2500 and CS 2501	5	PHIL 2325, POLS 2325, or PHIL 2330	4			
ENGW 1111	4	Elective	4			
PHIL 1115	4					
		19		18		8
						0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3000	4	Khoury Elective	4	ENGW 3302, 3309, or 3315	4	Co-op
PHIL 1145	4	PHIL elective 2	4	Elective	4	
PHIL elective 1	4	PHIL elective 3	4			
Elective	4	Elective	4			
		CS 1210	1			
		16		17		8
						0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		CS 3800	4	Elective	4	Co-op
		Khoury Elective	4	Elective	4	
		PHIL 4515	4			
		Elective	4			
		THTR 1170	1			
		0		17		8
						0
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		CS 4500	4	Elective	4	

PHIL intermediate/ advanced elective	4	Elective	4
PHIL capstone	4		
Elective	4		
0	16		8

Total Hours: 135

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1801	4	CS 2800 and CS 2801	5				
CS 2500 and CS 2501	5	PHIL 2325, POLS 2325, or PHIL 2330	4				
ENGW 1111	4	Elective	4				
PHIL 1115	4						
	18		18			0	0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Khoury Elective	4	Vacation		Co-op	
CS 3500	4	PHIL elective 1	4				
PHIL 1145	4	PHIL elective 2	4				
Elective	4	Elective	4				
		CS 1210	1				
	16		17			0	0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	ENGW 3302, 3309, or 3315	4	Co-op	
		PHIL 4515	4	Elective	4		
		PHIL elective 3	4				
		Elective	4				
		THTR 1170	1				
	0		17			8	0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury Elective	4	Elective	4	Co-op	
		PHIL intermediate/ advanced elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16			8	0

#### Year 5

Fall	Hours	Spring	Hours
Co-op		CS 4500	4
		PHIL capstone	4
		Elective	4
		Elective	4
	0		16

Total Hours: 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

**Computer Science Senior Seminar**

THTR 1170	The Eloquent Presenter	1
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**Physics Courses**

Code	Title	Hours
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**Required Courses**

PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
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PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
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**Intermediate Physics**

PHYS 2303	Modern Physics	4
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PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371 (Integrative course)	4
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**Advanced Physics**

PHYS 3600	Advanced Physics Laboratory	4
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PHYS 3602	Electricity and Magnetism 1	4
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PHYS 4305	Thermodynamics and Statistical Mechanics	4
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**Capstone and Electives**

Code	Title	Hours
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**Capstone**

Complete either one computer science capstone or the physics capstone:		4
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*Computer Science Capstone*

CS 4100	Artificial Intelligence	
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CS 4300	Computer Graphics	
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CS 4410	Compilers	
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CS 4150	Game Artificial Intelligence	
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CS 4550	Web Development	
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*Physics Capstone*

PHYS 5318	Principles of Experimental Physics	
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**Khoury Elective**

The computer science elective is not required if the student has completed the computer science capstone (above). With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
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CS 2500 or higher, except CS 5010		
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CY 2000 or higher, except CY 4930		
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DS 2500 or higher, except DS 4900		
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IS 2000 or higher, except IS 4900		
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**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
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PHYS 3000 to PHYS 5999		
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**Integrative Courses**

Code	Title	Hours
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**Calculus**

MATH 1341	Calculus 1 for Science and Engineering (a grade of C- or higher is required)	4
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MATH 1342	Calculus 2 for Science and Engineering (a grade of C- or higher is required)	4
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MATH 2321	Calculus 3 for Science and Engineering	4
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**Additional Mathematics Requirements**

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
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MATH 4525	Applied Analysis	4
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**Supporting Course**

Code	Title	Hours
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Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
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CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
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ENGL 2150	Literature and Digital Diversity	
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HIST 2220	History of Technology	
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INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
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IS 1300 or PHIL 1300	Knowledge in a Digital World	
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PHIL 1145	Technology and Human Values	
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SOCL 1280	The Twenty-First-Century Workplace	
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SOCL 3485	Environment, Technology, and Society	
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SOCL 4528	Computers and Society	
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**Computer Science Writing Requirement**

Code	Title	Hours
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**College Writing**

ENGW 1111	First-Year Writing	4
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**Advanced Writing in the Disciplines**

ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
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**Required General Electives**

Code	Title	Hours
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Complete 24 credits of general electives. 24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data

- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	MATH 1342	4	MATH 2321	4		
CS 2500 and CS 2501	5	PHYS 1165	4				
MATH 1341	4	PHYS 1166	1				
PHYS 1161	4	ENGW 1111	4				
PHYS 1162	1						
		20	18	8			0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 2800 and CS 2801	5	CS 3000	4	Elective	4	Co-op	0
MATH 2341	4	PHYS 3602	4	Elective	4		
PHYS 2371	3	PHYS 4305	4				
PHYS 2372	1	Computing and social issues	4				
PHYS 2303	4	CS 1210	1				
		17	17	8			0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 3800	4	PHYS 3600	4	Co-op	0
		Elective	4	Elective	4		
		PHYS elective if CS capstone (Khoury 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	Summer 2	Hours
Co-op	0	CS 4500	4	Elective	4		
		MATH 4525	4	Elective	4		
		PHYS elective	4				
		ENGW 3302	4				
		0	16	8			0

Total Hours: 137

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	MATH 1342	4				
CS 2500 and CS 2501	5	PHYS 1165	4				
MATH 1341	4	PHYS 1166	1				
PHYS 1161	4	ENGW 1111	4				
PHYS 1162	1						
		20	18	0			0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 3000	4	Vacation	0	Co-op	0
PHYS 2303	4	MATH 2321	4				
PHYS 2371	3	MATH 2341	4				
PHYS 2372	1	PHYS 4305	4				
CS 2800 and CS 2801	5	CS 1210	1				
		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	17	8			0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4500	4	Elective	4	Co-op	0
		MATH 4525	4	Elective	4		
		PHYS elective	4				
		Computing and social issues	4				
		0	16	8			0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS or PHYS capstone	4				

PHYS elective if CS capstone (Khoury elective if PHYS capstone)	4
Elective	4
Elective	4
0	16

Total Hours: 137

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

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0
CS 2500 and CS 2501	5	MATH 1342	4		
PHYS 1161	4	PHYS 1165	4		
PHYS 1162	1	PHYS 1166	1		
CS 1200	1	ENGW 1111	4		
MATH 1341	4				
	20		18		0

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3500	4	Co-op	0	Co-op	0
PHYS 2303	4				
PHYS 2371	3				
PHYS 2372	1				
CS 2800 and CS 2801	5				
CS 1210	1				
	18		0		0

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2321	4	Co-op	0	Co-op	0
CS 3000	4				PHYS 3600
MATH 2341	4				PHYS 4305
Elective	4				
	16		0		0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3800	4	Co-op	0	Co-op	0
Elective	4				Elective
PHYS 3602	4				
ENGW 3302	4				
THTR 1170	1				
	17		0		0

Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 4500	4	CS or PHYS capstone	4		

MATH 4525	4	PHYS elective if CS capstone (CS elective if PHYS capstone)	4
PHYS elective	4	Elective	4
Computing and social 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. 46).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

#### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4



**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Political Science Courses**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political Theory**

Complete one of the following: 4

POLS 2325 Ancient Philosophy and Political Thought

POLS 2328 Modern Political Thought

POLS 2330 American Political Thought

POLS 2332 Contemporary Political Thought

**Political Science Capstone**

POLS 4701	Political Science Senior Capstone	4
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**Political Science Electives**

Complete four courses in the following range: 16

POLS 2000 to POLS 5999

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 373)
- Campaigns and Elections (p. 373)
- Comparative Politics (p. 373)
- Identity, Culture, and Politics (p. 373)
- International Relations and Diplomacy (p. 373)
- Law and Legal Studies (p. 373)
- Public Policy (p. 373)
- Security Studies (p. 374)

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Requirement</b>		
Complete one of the following: 4		
POLS 2390	Science, Technology, and Public Policy	
POLS 3405	International Political Economy	

POLS 3406 International Law

POLS 3408 International Security

**Supporting Courses**

Code	Title	Hours
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 3485	Environment, Technology, and Society	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Computer Science and Political Science Major Credit Requirement**

100 semester hours required in the major

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Writing-Intensive in the Major

- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		

Code	Title	Hours
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following: 12		
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following: 12		

POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample Patterns:**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 2500 and CS 2501	5	IS 2000	4	CS 3500	4		
CS 1200	1	ENGW 1111	4				
POLS 1150 and POLS 1151	4	POLS 1160	4				
POLS 1155 and 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	ENGW 3302, 3308, 3311, or 3315	4	Co-op	
POLS 2399	4	Khoury elective 1	4	Elective	4		
POLS theory elective	4	POLS 2400	4				
Elective	4	POLS elective 1	4				
		16		17		8	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 2	4	Elective	4	Co-op	
		POLS elective 2	4	Elective	4		
		POLS elective 3	4				
		Computing and social issues requirement	4				
		THTR 1170	1				
		0		17		8	0

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	
Co-op		Khoury elective 3	4			
		POLS 4701	4	Elective	4	
		POLS elective 4	4	Elective	4	
		POLS integrative requirement	4			
		0		16		8

Total Hours: 134

**Five Year, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 2500 and CS 2501	5	IS 2000	4				
CS 1200	1	ENGW 1111	4				
POLS 1150 and POLS 1151	4	POLS 1160	4				
POLS 1155 and POLS 1156	4						
		19		17		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 1210	1	Vacation		Co-op	
CS 3500	4	CS 3200	4				
POLS 2399	4	POLS 2400	4				
POLS theory elective	4	POLS elective 1	4				
		16		17		0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 1	4	ENGW 3302, 3308, 3311, or 3315	4	Co-op	

	POLS elective 2	4	Elective	4		
	Computing and social issues requirement	4				
	Elective	4				
	THTR 1170	1				
		0		17	8	0
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		Khoury elective 2	4	Elective	4	Co-op
		POLS elective 3	4	Elective	4	
		POLS integrative requirement	4			
		Elective	4			
		0		16	8	0
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op		Khoury elective 3	4			
		POLS 4701	4			
		POLS elective 4	4			
		Elective	4			
		0		16		

Total Hours: 134

## Computer Science and Sociology, BS

The social aspects to computing continue to grow, primarily with respect to communication and the internet. The computer science and sociology combined major examines this significant impact on society and how people communicate and share culture. Students will have an opportunity to gain a solid programming foundation, as well as the practical and theoretical skills needed to address the complex social and cultural issues in a period of far-reaching social change.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
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### Computer Science Overview

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4

### Computer Science Writing-Intensive Requirement

Complete one of the following:		4
CS 4500	Software Development	
or CS 4530	Fundamentals of Software Engineering	
IS 3500	Information System Design and Development	
DS 4200	Information Presentation and Visualization (Take DS 3000 either as a prerequisite of or concurrently with DS 4200.)	

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	12
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

## Sociology Courses

Code	Title	Hours
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### Sociology Required Courses

SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4

### Sociology Electives

Complete one sociology elective in each of the following ranges:	12
Introductory elective: SOCL 1000 to SOCL 1999	
Intermediate elective: SOCL 2000 to SOCL 3999	

Advanced elective: SOCL 4000 to SOCL 4999

**Sociology Required Capstone**

SOCL 4600	Senior Seminar	4
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**Integrative Course Requirement**

Code	Title	Hours
Complete one of the following: 4		
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirements**

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

**Sociology GPA Requirements**

2.000 average GPA requirement across all sociology classes

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing-Intensive in the Major
- Writing in the First Year
- Advanced Writing in the Disciplines
- Interpreting Culture
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**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
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3200	4	Vacation
CS 2500 and CS 2501	5	IS 2000	4	CS 3500	4	
CS 1200	1	SOCL 2320	4			
ENGW 1111	4	ANTH 1101	4			
SOCL 1101	4					
		19		17		8

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3000	4	Co-op		Co-op		ENGW 3302, 3308, or 3315
CS 1210	1					Elective
SOCL 2321	4					
ANTH 2305	4					
Elective	4					
		17		0		0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Khoury elective 1	4	Co-op		Co-op		Elective
SOCL 3300	4					Elective
Sociology introductory elective	4					
Elective	4					
THTR 1170	1					
		17		0		0

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Khoury elective 2	4	SOCL 4600	4	Elective	4	
Sociology intermediate elective	4	CS writing-intensive requirement	4	Elective	4	
Elective	4	Sociology advanced elective	4			
Integrative requirement	4	Khoury elective 3	4			
		16		16		8

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 2500 and CS 2501	5	IS 2000	4				
CS 1200	1	SOCL 2320	4				
ENGW 1111	4	ANTH 1101	4				
SOCL 1101	4						
	19		17		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op		Co-op		Vacation	
CS 3500	4						
CS 1210	1						
SOCL 2321	4						
ANTH 2305	4						
	17		0		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
Elective	4					Elective	4
SOCL 3300	4						
Sociology introductory elective	4						
THTR 1170	1						
	17		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
Sociology intermediate elective	4					Elective	4
Elective	4						
Integrative requirement	4						
	16		0		0		8
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 2	4	SOCL 4600	4				
Sociology advanced elective	4	CS writing-intensive requirement	4				
Elective	4	Khoury elective 3	4				
Elective	4	Elective	4				
	16		16				

Total Hours: 134

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Cybersecurity Major Requirements

Code	Title	Hours
Computer Science Overview		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
Computer Science Fundamental Courses		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
Computer Science Required Courses		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
Cybersecurity Required Courses		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
CY 4740	Network Security	4
Cybersecurity Electives		
If courses require prerequisites, those should be taken using general electives.		
Complete one course from the following:		3-4
COMM 2551	Free Speech in Cyberspace	
CRIM 2200	Criminology	
CRIM 3030	Global Criminology	
CRIM 3400	Corporate Security: Securing the Private Sector	



CRIM 4040	Crime Prevention
CS 2800	Logic and Computation
CS 4240	Large-Scale Parallel Data Processing
CS 4400	Programming Languages
CS 4500	Software Development
CS 4710	Mobile and Wireless Systems
CS 6710	Wireless Network
CY 5200	Security Risk Management and Assessment
CY 5210	Information System Forensics
CY 5770	Software Vulnerabilities and Security
DS 4300	Large-Scale Information Storage and Retrieval
DS 4400	Machine Learning and Data Mining 1
EECE 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
IS 4300	Human Computer Interaction
LPSC 1101	Introduction to Law
LPSC 2301	Introduction to Law, Policy, and Society
LPSC 3303	Topics in Law and Public Policy
MATH 3527	Number Theory 1
MATH 4575	Introduction to Cryptography
PHIL 1145	Technology and Human Values
POLS 2390	Science, Technology, and Public Policy
POLS 3307	Public Policy and Administration
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Business Requirements**

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Statistics</b>		
MGSC 2301	Business Statistics	4
<b>Strategy</b>		
STRT 4501	Strategy in Action	4

**Business Concentration**

Complete a four-course business concentration from the following list. (p. )

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and Innovation (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Integrative Requirement**

Code	Title	Hours
MISM 2301	Management Information Systems	4

**Supporting Courses**

Code	Title	Hours
<b>Mathematics Courses</b>		
Complete one of the following: 4		
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1231	Calculus for Business and Economics	

**Economics**

Complete one of the following: 4		
ECON 1115	Principles of Macroeconomics	
ECON 1116	Principles of Microeconomics	

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives. 16		

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

### Business GPA Requirement

Minimum 2.000 GPA required in all business courses.

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

### Program Requirement

133 semester hours required

### Plan of Study

Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
CS 1800 and CS 1802	5	CY 2550	4	Elective 1	4		
CS 2500 and CS 2501	5	MATH 1341 or 1231	4				
ENGW 1111	4	ACCT 1201	4				
ECON 1115 or 1116	4						
		19	17		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 3700	4	MKTG 2201	4	Co-op	0
CS 3650	4	CY 3740	4	Elective 3	4		
ACCT 2301	4	Business concentration 1	4				
MGSC 2301	4	Elective 2	4				
		CS 1210	1				
		16	17		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 4170 or 5240	4	FINA 2201	4	Co-op	0

Business concentration 2	4	ORGB 3201	4		
Business concentration 3	4				
CY 4740	4				
THTR 1170	1				
		0	17		8
<b>Year 4</b>					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		ENGW 3302	4	STRT 4501	4
		MISM 2301	4	Elective 4	4
		Business concentration 4	4		
		Cybersecurity elective	4		
		0	16		8

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CY 2550	4				
CS 2500 and CS 2501	5	MATH 1341 or 1231	4				
ENGW 1111	4	ACCT 1201	4				
ECON 1115 or 1116	4						
		19	17		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	Vacation	0	Co-op	0
CS 3650	4	CS 3700	4				
ACCT 2301	4	CS 3000	4				
MGSC 2301	4	Business concentration 1	4				
		Elective 1	4				
		16	17		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 3740	4	FINA 2201	4	Co-op	0
		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		CY 4170 or 5240	4	ENGW 3302	4	Co-op	
		CY 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

## Cybersecurity and Criminal Justice, BS

The cybersecurity and criminal justice combined degree applies a multidisciplinary approach to ensuring the reliability and security of cyberspace. The program will provide students with a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. Students learn how social behavior, policy, and legal rules can affect cybersecurity and utilize comparative social science to understand, predict, and explain crime.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or CRIM 1000	First Year Seminar Criminal Justice at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5

CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4
<b>Cybersecurity Elective</b>		
Complete one of the following:		4
CS 2800	Logic and Computation	
CS 4710 or CS 6710	Mobile and Wireless Systems Wireless Network	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 4770	Cryptography	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
IS 4300	Human Computer Interaction	
EECE 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	
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	
<b>Computer Science Senior Seminar</b>		
THTR 1170	The Eloquent Presenter	1

### Supporting Courses

Code	Title	Hours
MATH 1341	Calculus 1 for Science and Engineering	

### Computer Science Writing Requirement

Code	Title	Hours
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#### College Writing

Complete one of the following:		4
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	

#### Advanced Writing in the Disciplines

Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Criminal Justice Requirements

Code	Title	Hours
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#### 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	Analyzing and Using Data on Crime and Justice	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 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
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#### Criminal Justice Capstone

Complete one of the following:		4
CRIM 4949	Senior Capstone Seminar	

CY 4930	Cybersecurity Capstone	
CY 4940	Research Projects on National Security	

### Criminal Justice Co-op Integration

Code	Title	Hours
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Co-op students should complete at least one of the following courses. CRIM 3000 is required for the first co-op. CRIM 4000 is required if a second co-op is taken:

CRIM 3000	Co-op Integration Seminar 2	1
CRIM 4000	Co-op Integration Seminar 3	1

### Integrative Requirement

Code	Title	Hours
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#### Cybersecurity Integrative Course

CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	

#### 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 Sector	
CRIM 3500	Policing a Democratic Society	
CRIM 5900	Topics in Criminal Justice and Criminology	

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

### Program Requirement

133 total semester hours required.

### Plan of Study

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation
CS 1800 and CS 1802	5	CY 2550	4			
CS 2500 and CS 2501	5	CRIM 2100	4			
CRIM 1100	4	CRIM 2200	4			
ENGW 1111	4					
		19		17		0

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3500	4	CS 3000	4	Vacation		Co-op
CS 3650	4	CS 1210	1			
MATH 1341	4	CS 3700	4			
CRIM 3600	4	CRIM 3700	4			

		CRIM Elective: Thematic	4				
	16		17	0			0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		CY 3740	4	General Elective	4	Co-op	
		CRIM 3000	1	General Elective	4		
		CRIM Elective: Survey	4				
		CRIM Elective: System-wide	4				
		General Elective	4				
	0		17	8			0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		CY 4740	4	ENGW 3302	4	Co-op	
		CY 4170	4	General Elective	4		
		CRIM 4000	1				
		CRIM Integrative Course	4				
		General Elective	4				
	0		17	8			0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op		THTR 1170	1				
		Capstone	4				
		Cybersecurity Elective	4				
		CRIM Elective: General	4				
		General Elective	4				
	0		17				

Total Hours: 136

## Cybersecurity and Economics, BS

The cybersecurity and economics combined degree applies a multidisciplinary approach integrating fundamental economics courses with a strong programming foundation. Students will study both the behavior of individuals and the collective behavior of industries and governments, utilizing computing skills to ensure the reliability and security of cyberspace.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
<b>Cybersecurity Elective</b>		
	Complete one of the following:	4
CS 2800	Logic and Computation	
CS 4710	Mobile and Wireless Systems	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 4770	Cryptography	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
IS 4300	Human Computer Interaction	
EECE 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 4040	Crime Prevention
CRIM 3400	Corporate Security: Securing the Private 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

<b>Computer Science Senior Seminar</b>		
THTR 1170	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
<b>College Writing</b>		
Complete one of the following: 4		
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one of the following: 4		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Economics Requirements**

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4

ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Electives</b>		
Complete 4 ECON electives that are found in the following ranges, with at least two numbered at ECON 3000 or above: 16		
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

**Integrative Requirement**

Code	Title	Hours
<b>Capstone</b>		
Complete one of the following: 4		
ECON 4692	Senior Economics Seminar	
CY 4930	Cybersecurity Capstone	
CY 4940	Research Projects on National Security	

**Integrative Requirement**

ECON 2560	Applied Econometrics	4
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**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives. 24		

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Economics GPA Requirement**

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

**Program Requirement**

133 total semester hours required.

**Plan of Study**

**Sample Plan of Study: Four Years, Two Co-ops in Summer 2/ Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Elective	4	Elective	4
CS 2500 and CS 2501	5	CY 2550	4	Elective	4	Elective	4
CS 1800 and CS 1802	5	ECON 1116	4				
ENGW 1111	4	MATH 1341	4				
ECON 1115	4						
		19			17		
					8		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 3000	4	Elective	4	Co-op	4



CS 3650	4	CS 1210	1	Elective	4
ECON 2315	4	CS 3700	4		
ECON 2350	4	ECON 2316	4		
		ECON elective 1	4		
16		17		8	
0					

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CY 3740	4	ECON elective 3	4	Co-op	
		ECON 2560	4	ENGW 3302	4		
		THTR 1170	1				
		Cybersecurity Elective	4				
		ECON elective 2	4				
0		17		8		0	

**Year 4**

Fall	Hours	Spring	Hours
Co-op		CY 4170	4
		CY 4740	4
		Capstone	4
		ECON elective 4	4
0		16	

Total Hours: 134

## Data Science and Biochemistry, BS

The Data Science and Biochemistry Major combines computer science, biochemistry, biology, information science, mathematics, and statistics into an integrated curriculum. The program engages students in rigorous 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Foundations

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4

### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Khoury Elective

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

DS 2500 or higher, except DS 4900

CY 2000 or higher, except CY 4930

IS 2000 or higher, except IS 4900

### Supporting Courses for Data Science

THTR 1170	The Eloquent Presenter	1
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### Statistics Foundations

Complete one of the following: 4

ENVR 2500 and ENVR 2501 Biostatistics  
and Lab for ENVR 2500

MATH 3081 Probability and Statistics

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

### Advanced Writing in the Disciplines

ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4
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### Biochemistry Requirements

Code	Title	Hours
<b>Biology Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4

### Chemistry Foundations

CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

**Mathematics Foundations**

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4

**Biochemistry Foundations**

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	3-5
or CHEM 4620	Introduction to Protein Chemistry	
or CHEM 5620	Protein Chemistry	

**Intermediate or Advanced Science Elective**

Complete one course from the following	4-5
BIOL 2301 to BIOL 5999	
CHEM 2311 to CHEM 5999	
EEMB 2290 to EEMB 5999	
ENVR 2310 to ENVR 5999	
MATH 2280 to MATH 5999	
PHYS 2303 to PHYS 5999	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
BINF 6308	Bioinformatics Computational Methods 1	4
BINF 6309	Bioinformatics Computational Methods 2	4
Complete one of the following:		4
BIOL 4701	Biology Capstone	
CHEM 4750	Senior Research	
DS 4900	Data Science Senior Project	

**Required General Electives**

Code	Title	Hours
Complete 12 credits of general electives.		12

**Major GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

136 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Five Years, Three Co-ops**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation
CS 1800 and CS 1802	5	BIOL 2299	4			

CS 2500 and CS 2501	5	MATH 1341	4		
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5		
ENGW 1111	4				
		20	18	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	BIOL 2301 and BIOL 2302	5	CS 3200	4	Co-op	
DS 3000	4	DS 4200	4	BIOL 2309	4		
MATH 1342	4	CHEM 2311 and CHEM 2312	5				
Intermediate/Advanced Science Elective	4	CS 1210	1				
		Statistics Foundation	4				
		16	19	8		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	ENGW 3302	4	Co-op	
		CHEM 2313 and CHEM 2314	5	BIOL 3611 and BIOL 3612	5		
		Khoury Elective	4				
		General Elective	4				
		0	17	9		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Vacation		Co-op	
		THTR 1170	1				
		BINF 6308	4				
		CHEM 2331 or 4620	4				
		General Elective	4				
		0	17	0		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		Capstone	4
		BINF 6309	4
		General Elective	4
		0	12

Total Hours: 136

## Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4	MATH 1342	4		
CS 2500 and CS 2501	5	MATH 1341	4				
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5				
ENGW 1111	4						
		20	18		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DS 3000	4	BIOL 2301 and BIOL 2302	5	CS 3200	4	Co-op	
Intermediate/ Advanced Science Elective	4	DS 4200	4	BIOL 2309	4		
Statistics Foundation	4	DS 4300	4				
General Elective	4	CHEM 2311 and CHEM 2312	5				
		CS 1210	1				
		16	19		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	ENGW 3302	4	Co-op	
		CHEM 2313 and CHEM 2314	5	BIOL 3611 and BIOL 3612	5		
		BINF 6308	4				
		Khoury Elective	4				
		THTR 1170	1				
		0	18		9		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BINF 6309	4	General Elective	4		
		CHEM 2331 or 4620	4				
		Capstone	4				
		General Elective	4				
		0	16		4		

Total Hours: 136

## Data Science and Biology, BS

The data science and biology major provides a strong foundation in biology, chemistry, and mathematics, as well as software development

and algorithms. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. Students also explore the organization and processes of life across broad areas of the field, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Supporting Course for Data Science</b>		
THTR 1170	The Eloquent Presenter	1
<b>Statistics Foundations</b>		

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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### Computer Science Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
or ENGW 3307	Advanced Writing in the Sciences	

### Biology Requirements

Code	Title	Hours
<b>Biology Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

#### Chemistry Foundations

CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

#### Intermediate and Advanced Biology Elective

Complete one of the following:		4
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
EEMB 2290 to EEMB 5515		
EEMB 5520 to EEMB5534		
EEMB 5548 to EEMB 5569		
ENVR 5242	Ancient Marine Life Research:	
BIOL 4991	Research	
BIOL 4970	Junior/Senior Honors Project 1	
BIOL 4971	Junior/Senior Honors Project 2	
BIOL 4994	Internship	

#### Organismal and Population Biology Elective

Complete one course and its corresponding lab, if indicated:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	

EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2618 and EEMB 2619	Vertebrate Zoology and Lab for EEMB 2618	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

#### Physics Requirement

Complete one of the following lecture/lab pairs. PHYS 1145/PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152	Physics for Engineering 1 and Lab for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

#### Mathematics Foundations

MATH 1251	Calculus and Differential Equations for Biology 1	4
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### Integrative Requirements

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
BIOL 5569	Advanced Microbiology	
BINF 6308	Bioinformatics Computational Methods 1	
BIOL 4707	Cell and Molecular Biology	
BIOL 5581	Biological Imaging	
BIOL 5587	Comparative Neurobiology	
BIOL 5591	Advanced Genomics	

#### Capstone

Complete one of the following:		4
BIOL 4701	Biology Capstone	
DS 4900	Data Science Senior Project	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

141 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

Year 1		Year 2		Year 3		Year 4		Year 5	
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Summer 1	Hours
CS 1200		1	CS 2510 and CS 2511	5	Vacation		Vacation		

CS 1800 and CS 1802	5	BIOL 2299	4			
CS 2500 and CS 2501	5	MATH 1251	4			
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5			
ENGW 1111	4					
	20		18		0	0
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b> <b>Hours</b>
DS 3000	4	CS 1210	1	Vacation		Co-op
CS 3500	4	DS 4200	4			
PHYS 1145 and PHYS 1146	5	BIOL 2301 and BIOL 2302	5			
CHEM 2311 and CHEM 2312	5	ENVR 2500 and ENVR 2501	5			
		CHEM 2313 and CHEM 2314	5			
	18		20		0	0
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b> <b>Hours</b>
Co-op		CS 3200	4	BIOL 3611 and BIOL 3612	5	Co-op
		DS 4300	4	General elective	4	
		BIOL 2309	4			
		BIOL intermediate/ advanced elective	4			
	0		16		9	0
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b> <b>Hours</b>
Co-op		DS 4400	4	ENGW 3302	4	Co-op
		THTR 1170	1	General elective	4	
		Khoury Elective	4			
		Integrative course	4			
		General elective	4			
	0		17		8	0
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op		Capstone	4			
		Organismal and population biology elective	4			
		General elective	4			

General elective	4
0	16

Total Hours: 142

## Data Science and Behavioral Neuroscience, BS

The data science and behavioral neuroscience major combines the disciplines of biology, psychology, computer science, and data science into an integrated curriculum. The human brain is a complex information processing system requiring scientists to analyze, integrate, and share large data sets garnered from multiple techniques that image and record the activity of the brain at work. Students investigate the anatomy and physiology of neural circuits that underlie brain mechanisms and pathological states that give rise to behavioral functions. Students have an opportunity to develop skills in large-scale data manipulation and storage, machine learning, data mining, and information visualization necessary to execute big brain-mapping initiatives including human neuroconnectivity maps.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	1
<b>Computer Science Foundations</b>		
A grade of C- or higher is required in all computer science foundations courses except CS 1802:		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4

DS 4400	Machine Learning and Data Mining 1	4
<b>Supporting Course for Data Science</b>		
THTR 1170	The Eloquent Presenter	1
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
PSYC 2320	Statistics in Psychological Research	

<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000).

<sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).

## Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405 or BIOL 5587	Neurobiology Comparative Neurobiology	4
PT 5410 and PT 5411 or PSYC 3200	Functional Human Neuroanatomy and Lab for PT 5410 Clinical Neuroanatomy	4-5
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	

PSYC 3451	Learning Principles and Behavior Analysis
PSYC 3452	Sensation and Perception
PSYC 3358	Behavior Therapies
PSYC 3464	Psychology of Language
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4524	Cognitive Development

## Behavioral Neuroscience Core Courses 8

Complete two of the following:	
BIOL 3403	Animal Behavior
BIOL 3415	Current Topics in Behavioral Neuroscience
BIOL 3601	Neural Systems and Behavior
BIOL 3605	Developmental Neurobiology
BIOL 4705	Neurobiology of Cognitive Decline
BIOL 4709	Neurobiology of Learning and Memory
BIOL 5595	Cell and Molecular Neuroscience
BIOL 5601	Multidisciplinary Approaches in Motor Control
PSYC 3506	Neuropsychology of Fear
PSYC 3508	Behavioral Endocrinology
PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

## Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
PSYC 4540 or BINF 6308	Quantitative Topics in Psychology and Behavioral Neuroscience Bioinformatics Computational Methods 1	4
CS 4100	Artificial Intelligence	4
<b>Upper-Division Elective</b>		
Complete four credits from the following list, not taken to fulfill previous requirements:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
BNSC 4970 or higher		
BIOL 3400 or higher		
BINF 6309	Bioinformatics Computational Methods 2	
PSYC 3200 or higher		

## Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses



### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4				
CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1107 and BIOL 1108	5	MATH 1341	4				
ENGW 1111	4						
	20		18		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation		Co-op	
BIOL 3405 or 5587	4	CS 3200	4				
PSYC 1101	4	CHEM 2311 and CHEM 2312	5				
BIOL 2301 and BIOL 2302	5	CS 1210	1				
		PSYC 2320	4				
	17		18		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	General elective	4	Co-op	
		BNS foundation	4	PSYC elective	4		
		General elective	4				
		PSYC 3200	4				
		THTR 1170	1				
	0		17		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	Vacation		Co-op	
		BNS integrative course	4			ENGW 3315 (online)	4
		BNS foundation	4				
		General elective	4				
	0		16		0		4

Year 5			
Fall	Hours	Spring	Hours
Co-op		DS 4400	4
		CS 4100	4
		Integrative advanced elective	4
		General elective	4
	0		16

Total Hours: 134

#### Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	MATH 1341	4	PSYC 1101	4		
CS 2500 and CS 2501	5	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
ENGW 1111	4						
	20		18		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	PSYC elective	4	Co-op	
DS 3000	4	DS 4200	4	General elective	4		
BIOL 3405 or 5587	4	CHEM 2311 and CHEM 2312	5				
BIOL 2301 and BIOL 2302	5	BNS foundation	4				
		PSYC 2320	4				
	17		18		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	General elective	4	Co-op	
		THTR 1170	1	Integrative advanced elective	4	ENGW 3315 (online)	4
		BNS foundation	4				
		PSYC 3200	4				
		General elective	4				
	0		17		8		4

**Year 4**

Fall	Hours	Spring	Hours
Co-op		DS 4400	4
		CS 4100	4
		BNS integrative course	4
		General elective	4
	0		16

Total Hours: 134

**Data Science and Business Administration, BS**

The data science and business combined major integrates a technical degree with the theory and practice of management through active learning, problem-driven research, corporate partnerships, and experiential assignments. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. This program reflects the impact of data in modern business practice.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4

DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective**

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
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CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Business Courses**

Code	Title	Hours
<b>Required Business Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MGSC 2301	Business Statistics	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4
Complete one of the following:		4
ENTR 2301	Innovation!	
MISM 2301	Management Information Systems	
SCHM 2301	Supply Chain and Operations Management	
STRT 4501	Strategy in Action	

**Business Concentration**

Complete a four-course business concentration from the following list.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Marketing (p. 292)
- Marketing Analytics (p. 293)

*Note: If the Marketing Analytics concentration is selected an additional general elective is required.*

- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

### Integrative Course

Code	Title	Hours
BUSN 5001	Data-Driven and Technology-Enabled Value Creation in Digital Economy	4

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1231	Calculus for Business and Economics	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
	Complete 16 credits of general electives.	16

### Business Cooperative Education Requirement

Complete one six-month co-op experience.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Business GPA Requirement

Minimum 2.000 GPA required in business courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Ethical Reasoning
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major

- Demonstrating Thought and Action in a Capstone

*Integrating Knowledge and Skills Through Experience* is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	CS 3200	4	ACCT 2301	4		
CS 2500 and CS 2501	5	MATH 1341	4				
ACCT 1201	4	ECON 1115	4				
ENGW 1111	4						
		19		17		8	
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MGSC 2301	4	CS 1210	1	MKTG 2201	4	Co-op	
DS 3000	4	DS 4200	4	Elective	4		
INTB 1203	4	DS 4300	4				
Elective	4	Business concentration 1	4				
		Elective	4				
		16		17		8	
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	FINA 2201	4	Co-op	
		SCHM 2301	4	ORGB 3201	4		
		Business concentration 2	4				
		Khoury elective	4				
		THTR 1170	1				
		0		17		8	
						0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4900	4	ENGW 3302	4		
		BUSN 5001	4	Elective	4		
		Business concentration 3	4				
		Business concentration 4	4				
		0		16		8	

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 3200	4				
CS 1200	1	ACCT 1201	4				
ECON 1115	4	Elective	4				
ENGW 1111	4						
	19		17		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	FINA 2201	4	Vacation	0	Co-op	0
MATH 1341	4	INTB 1203	4				
MGSC 2301	4	DS 3000	4				
ACCT 2301	4	CS 1210	1				
		Elective	4				
	16		17		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4200	4	ORGB 3201	4	Co-op	0
		DS 4300	4	MKTG 2201	4		
		Business concentration 1	4				
		MISM 2301	4				
		THTR 1170	1				
	0		17		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Business concentration 2	4	ENGW 3302	4	Co-op	0
		Business concentration 3	4	Elective	4		
		Khoury elective	4				
		Elective	4				
	0		16		8		0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4900	4				
		SCHM 2301	4				
		BUSN 5001	4				
		Business concentration 4	4				
	0		16				

Total Hours: 134

### Data Science and Ecology and Evolutionary Biology, BS

The combined major in data science and ecology and evolutionary biology provides a strong foundation in the fundamentals of ecology and evolutionary biology, including focal points in population, community, and ecosystem ecology; evolutionary ecology and biology; conservation biology; population genetics; behavior; and ecological and evolutionary genomics. Data science allows students to study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The interdisciplinary nature of the major fosters critical thinking and creativity in scientific problem solving.

#### Program Requirements

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

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Data Science Course Work

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective Courses</b>		
	Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Ecology and Evolutionary Biology Course Work**

Code	Title	Hours
<b>Ecology and Evolutionary Biology</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
<b>Ecology and Evolutionary Genomics</b>		
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Evolution</b>		
EEMB 2400	Introduction to Evolution	4
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<b>Capstone</b>		
ENVR 4997	Senior Thesis	4

**Ecology and Evolutionary Biology Topical Requirement**

Code	Title	Hours
Complete 16 credits of the following. At least one course must be taken from each list.		16
<i>Evolution of Organisms</i>		
EEMB 2290	Ecology and Evolution of Behavior	
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 3450	Physiological Adaptations to the Environment	
MARS 3210	Marine Mammals	
MARS 3430	Biology of Whales	
<i>Ecology and Conservation Biology</i>		
EEMB 3460	Conservation Biology	
EEMB 3475	Wildlife Ecology	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 3470 and EEMB 3471	Coastal Ecology and Sustainability and Lab for EEMB 3470	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	
MARS 3315	Wetlands: Ecology and Hydrology	
<i>Analytical Skills</i>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3465	Ecological and Conservation Genomics	

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
<b>Physics</b>		
Complete one of the following:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
DS 4900	Data Science Senior Project	4

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS,CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year

- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

136 total semester hours required

**Plan of Study**

**Sample Patterns:**

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	ENVR 2500 and ENVR 2501	5	Physics requirement	5		
CS 2500 and CS 2501	5	EEMB 1105 and EEMB 1106	5				
ENGW 1111	4	CS 3200	4				
EEMB 1101 and EEMB 1102	5						
		20	19	9			0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5	MATH 1251 or 1341	4	Elective	4	Co-op	
BIOL 2301 and BIOL 2302	5	DS 4200	4	Elective	4		
DS 3000	4	DS 4300	4				
EEB topical requirement	4	CS 1210	1				
		Elective	4				
		18	17	8			0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		EEMB 2400	4	ENGW 3302	4	Co-op	
		EEB topical requirement	4	Khoury elective	4		
		EEB topical requirement	4				
		EEMB 2302 and EEMB 2303	5				
		THTR 1170	1				
		0	18	8			0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		DS 4400	4	Elective	4
		DS 4900	4		
		ENVR 4997	4		
		EEB topical requirement	4		
		0	16	4	

Total Hours: 137

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	EEMB 1105 and EEMB 1106	5				
ENGW 1111	4	MATH 1251 or 1341	4				
EEMB 1101 and EEMB 1102	5						
		20	18	0			0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation	0	Co-op	0
CHEM 1211 and CHEM 1212 and CHEM 1213	5	EEB topical requirement	4				
ENVR 2500 and ENVR 2501	5	CS 1210	1				
BIOL 2301 and BIOL 2302	5	Physics requirement	5				
		19	14	0			0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4200	4	Elective	4	Co-op	0
		EEB topical requirement	4	Elective	4		
		EEMB 2400	4				
		THTR 1170	1				
		Khoury elective	4				
		0	17	8			0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4300	4	Elective	4	Co-op	0
		DS 4400	4	ENGW 3302	4		



	EEMB 2302 and EEMB 2303	5		
	Elective	4		
		0	17	8
				0
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Co-op		ENVR 4997	4	
		DS 4900	4	
		EEB topical requirement	4	
		EEB topical requirement	4	
		0	16	

Total Hours: 137

## Data Science and Economics, BS

The combined major in data science and economics integrates fundamental economics courses with a strong programming foundation. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. Utilizing these skill sets allows students to address complex issues in the behavior of individuals and the collective behavior of industries and governments.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210 or EESH 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4

### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4

### Economics Electives

Complete five economics elective courses that are found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range:

ECON 1200–ECON 1999		20
ECON 3000–ECON 4689		
ECON 4900–ECON 4999		
ECON 5200–ECON 5999		

### Economics Capstone

ECON 4692	Senior Economics Seminar	4
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### Integrative Course Requirement

Code	Title	Hours
ECON 2560	Applied Econometrics	4

### Supporting Course Requirements

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231 or MATH 1341	Calculus for Business and Economics Calculus 1 for Science and Engineering	4

### Computing and Social Issues

Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Economics GPA Requirement

Grades in the following four courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major

- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Pattern:

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

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Elective
CS 1800 and CS 1802	5	CS 3200	4	ECON 2315	4	Elective
CS 2500 and CS 2501	5	ECON 1116	4			
ECON 1115	4	MATH 1231 or 1341	4			
ENGW 1111	4					
		19	17	8	8	8

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
DS 3000	4	CS 1210	1	ENGW 3302, 3308, 3311, or 3315	4	Co-op
ECON 2350	4	ECON 2316	4	Elective	4	
DS 4200	4	DS 4300	4			
ECON elective 1	4	ECON elective 2	4			
		Elective	4			
		16	17	8	8	0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		Khoury elective	4	Elective	4	Co-op
		Computing and social issues requirement	4	Elective	4	
		DS 4400	4			
		ECON 2560	4			
		THTR 1170	1			
		0	17	8	8	0

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		ECON 4692	4			
		ECON elective 3	4			
		ECON elective 4	4			

ECON elective 5	4
0	16

Total Hours: 134

## Data Science and Environmental Science, BS

The data 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 analysis of large amounts of data—an ideal fit with data science, where students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective Courses</b>		

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Environmental Science Courses

Code	Title	Hours
<b>Environmental Science Required Courses</b>		
ENVR 1101	Environmental Science	4
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	5
ENVR 5210	Environmental Planning	4
ENVR 4900	Earth and Environmental Science Capstone	1
or ENVR 4997	Senior Thesis	
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	
<b>Environmental Science Integrative Courses</b>		
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	
<b>Environmental Science Electives</b>		
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
EEMB 3465	Ecological and Conservation Genomics	
EEMB 4000	Applied Conservation Biology	
ENVR 1110	Global Climate Change	
ENVR 2310	Earth Materials	
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 3151	Food Sustainability in the Mediterranean - Abroad	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 4504	Environmental Pollution	
ENVR 5190	Soil Science	
ENVR 5201	Geologic Field Seminar	
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	
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
DS 4900	Data Science Senior Project	4

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year

- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

138 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
CS 1200		1 CS 2510 and CS 2511		5 CS 3500		4 Vacation
CS 1800 and CS 1802	5	ENVR 1101	4	CS 3200		4
CS 2500 and CS 2501	5	ENVR 1202 and ENVR 1203		5		
ENVR 1200 (ENVR 1201 (lab if offered))	4	ENVR 2500 and ENVR 2501		5		
ENGV 1111		4				
		19			19	8
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENVR 5210	4	CHEM 1214 and CHEM 1215 and CHEM 1216		5 MATH 1341 or 1251		4 Co-op
CHEM 1211 and CHEM 1212 and CHEM 1213	5	MATH 1251 or 1341	4	Elective		4
DS 3000	4	DS 4200		4		
ENVR elective	4	DS 4300		4		
		CS 1210		1		
		17			18	8
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		ENVR elective		4 ENGV 3302		4 Co-op
		Khoury elective		4 Elective		4
		ENVR elective		4		

	ENVR integrative (take lab if offered)	4		
	THTR 1170	1		
		0	17	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>
Co-op		ENVR 4900 (or ENVR 4997 (if short of credit hours))	1	Elective
		DS 4400	4	Elective
		DS 4900	4	
		ENVR integrative	4	
		ENVR elective	4	
		0	17	8

Total Hours: 139

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

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation
CS 1800 and CS 1802	5	CS 3200	4			
CS 2500 and CS 2501	5	ENVR 1101	4			
ENVR 1200 (ENVR 1201 (if offered))	4	ENVR 1202 and ENVR 1203	5			
ENGW 1111	4					
	19		18		0	0

<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 3500	4	CHEM 1214 and CHEM 1215 and CHEM 1216	5	Vacation	0	Co-op
CHEM 1211 and CHEM 1212 and CHEM 1213	5	DS 3000	4			
ENVR 5210	4	ENVR elective	4			
ENVR 2500 and ENVR 2501	5	CS 1210	1			
		Elective	4			
	18		18		0	0

<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	MATH 1251 or 1341	4	Elective	4
		ENVR integrative (take lab if offered)	4	Elective	4
		ENVR elective	4		
		THTR 1170	1		
		Khoury elective	4		
	0		17		8

<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	DS 4200	4	Elective	4
		DS 4300	4	ENGW 3302	4
		ENVR integrative	4		
		Elective	4		
	0		16		8

<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op		ENVR 4900 (ENVR 4997 (if short of credit hours))	1		
		DS 4400	4		
		DS 4900	4		
		ENVR elective	4		
		ENVR elective	4		
	0		17		0

Total Hours: 139

## Data Science and Health Science, BS

The health science and computer science combined major offers a solid academic and experiential foundation integrating studies in health administration, computer science, mathematics, and statistics. This program reflects the impact of data in modern healthcare and prepares students for success in careers in health administration, community-based health promotion, public health, and big data analysis.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Foundation</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3500	Object-Oriented Design	4
CS 3200	Database Design	4
<b>Information Science Requirement</b>		
IS 4300	Human Computer Interaction	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

## Supporting Courses for Data Science

Code	Title	Hours
MATH 1341 or MATH 1241	Calculus 1 for Science and Engineering Calculus 1	4

## Data Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350	Community and Public Health	4

or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

## Supporting Courses for Health Science

Code	Title	Hours
<b>Research Methods</b>		
Complete one of the following:		4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	
IS 4800	Empirical Research Methods	
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
PSYC 2320	Statistics in Psychological Research	
ECON 2350	Statistics	
ENVR 2500	Biostatistics	
MATH 3081	Probability and Statistics	

## Philosophy

Complete one of the following:		4
PHIL 1145	Technology and Human Values	
PHIL 1165	Moral and Social Problems in Healthcare	

## Life Sciences Core

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
PSYC 1101	Foundations of Psychology	4

## Integrative Requirement

Code	Title	Hours
<b>Upper-Division Elective</b>		
Complete four credits from the following:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
PHTH 4000 or higher		
HSCI 4000 or higher		

## Integrative Course

DS 4900	Data Science Senior Project	4
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## Required General Electives

Code	Title	Hours
Complete 16 credits general electives.		16



## Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

## Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

## Program Requirement

136 semester hours required

## Plan of Study

### Five Year, Two Co-op Sample Plan of Study

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 2500 and CS 2501	5	BIOL 1113 and BIOL 1114	5				
CS 1800 and CS 1802	5	PSYC 1101	4				
BIOL 1111 and BIOL 1112	5	MATH 1341	4				
ENGW 1111	4						
	20		18		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 1260	4	CS 1210	1	Vacation		Co-op	
PHTH 2300	4	PHTH 2515	4				
CS 3500	4	DS 3000	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5	CS 3200	4				
		General Elective	4				
	17		17		0		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		IS 4300	4	Vacation		Co-op	
		DS 4200	4				
		PHTH 2350	4				
		Statistics Course	4				
	0		16		0		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Upper Division Elective	4	Vacation		Vacation	
		DS 4300	4				
		ENGW 3302	4				
		General Elective	4				
	0		16		0		0

#### Year 5

Fall	Hours	Spring	Hours
PHTH 4540	4	DS 4900	4
HLTH 5450, PHTH 4202, or IS 4800	4	DS 4400	4
PHIL 1145 or 1165	4	PHTH 4120	4
General Elective	4	General Elective	4
	16		16

Total Hours: 136

## Data Science and Journalism, BS

The data science and journalism combined major offers students an opportunity to gain the skills to be able to engage in both the print and digital worlds of journalism. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data. Combined with learning the principles, practices, and responsibilities of journalism, students can extract meaning from massive information flows and utilize it in effective investigative reporting.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4

DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Journalism Major Requirements**

Students transferring from outside institutions must complete a minimum of five 4-credit journalism courses at Northeastern, and these must include:

Code	Title	Hours
JRNL 2201	Journalism 2: Intermediate Reporting	
JRNL 2301	Visual Storytelling in Journalism	
JRNL 4650	Ethics and Issues in Journalism	

Code	Title	Hours
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**Journalism Courses**

A grade of C or higher is required:

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4

**Required Journalism**

JRNL 1150	Understanding Today's News	4
JRNL 3550	The First Amendment and the Media	4
JRNL 4650	Ethics and Issues in Journalism	4

**Journalism Electives**

Complete three JRNL courses. 12

**Supporting Courses**

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Statistics Foundation</b>		
ECON 2350	Statistics	4

**Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		

*This course already fulfills a Journalism requirement above.*

JRNL 2301	Visual Storytelling in Journalism
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**Computing and Social Issues**

Complete one of the following: 4

ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Integrative Requirement**

Code	Title	Hours
Complete one of the following: 4		
JRNL 3700	Data Storytelling	
JRNL 5500	Coding for Digital Storytelling	

**Required General Electives**

Code	Title	Hours
Complete 20 credits of general electives.		20

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, IS courses

**Journalism GPA Requirement**

Minimum 2.000 GPA required in all JRNL courses

**Program Requirement**

134 total semester hours required

**Plan of Study**

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

Year 1	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
	CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	0
	CS 1800 and CS 1802	5	CS 3200	4	MATH 1341	4		

CS 2500 and CS 2501	5	JRNL 2201	4		
JRNL 1101 and JRNL 1102	5	ENGW 1111	4		
JRNL 1150	4				
	20		17	8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2301	4	CS 1210	1	ECON 2350	4	Co-op	
JRNL 3700 or 5500	4	DS 3000	4	Elective	4		
JRNL elective 1	4	DS 4200	4				
Computing and social issues	4	JRNL 3550	4				
		JRNL 3610	4				
	16		17		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	Elective	4	Co-op	
		Khoury elective	4	Elective	4		
		JRNL 4650	4				
		THTR 1170	1				
		JRNL elective 2	4				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Elective	4		
		DS 4900	4	Elective	4		
		CY 4170	4				
		JRNL elective 3	4				
	0		16		8		0

Total Hours: 135

**Sample Pattern, Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	JRNL 2201	4				
JRNL 1101 and JRNL 1102	5	ENGW 1111	4				
JRNL 1150	4						
	20		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation	0	Co-op	0
MATH 1341	4	JRNL 2301	4				
JRNL 3700 or 5500	4	JRNL 3610	4				
Computing and social issues	4	JRNL elective	4				
		CS 1210	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	ECON 2350	4	Co-op	
		DS 4300	4	Elective	4		
		JRNL 3550	4				
		JRNL elective	4				
		THTR 1170	1				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Elective	4	Co-op	
		Khoury elective	4	Elective	4		
		JRNL 4650	4				
		JRNL elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		DS 4900	4
		CY 4170	4
		Elective	4
		Elective	4
	0		16

Total Hours: 135

**Data Science and Linguistics, BS**

The data science and linguistics combined major provides students with extensive background in the formal structures of natural (human) languages and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms. The program teaches the methods and applications of linguistic and psycholinguistic analyses of human language data combined with skills in big data analysis, data science, and data analytics. The major provides excellent preparation for work or more advanced degrees focusing on computational linguistics, natural language processing, machine learning, and a wide array of related fields.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Course</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

## Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12

LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

## Psychology Requirements

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4

## Laboratory/Directed Study

Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
PSYC 4610	Laboratory in Psycholinguistics	

## Seminar Requirement

LING 4654	Seminar in Linguistics	4
or PSYC 4658	Seminar in Psycholinguistics	

## Linguistics Elective

Complete one LING course, not counted elsewhere, numbered 3000–4799, or one of the following:

DEAF 2700	ASL Linguistics	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	

With prior approval, directed study research, independent study, and Honors Project courses can also be counted:

LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
PSYC 4991	Directed Study Research	

## Supporting Courses

Code	Title	Hours
<b>Mathematics Requirement</b>		
A grade of C– or better is required:		
MATH 1341	Calculus 1 for Science and Engineering	4

## Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
CS 4120	Natural Language Processing	4

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4

or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines
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### Required General Electives

Code	Title	Hours
	Complete 20 credits of general electives.	20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Elective	4
CS 1800 and CS 1802	5	LING 2350	4	PSYC 1101	4	Elective	4
CS 2500 and CS 2501	5	CS 3200	4				
LING 1150	4	MATH 1341	4				
ENGW 1111	4						
		19		17		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	CS 1210	1	PSYC 2320	4	Co-op	
DS 3000	4	DS 4200	4	Elective	4		
PSYC 3464	4	Linguistic structure	4				
Linguistic structure	4	LING elective	4				
		Elective	4				
		16		17		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4120	4	ENGW 3302	4	Co-op	
		DS 4300	4	Elective	4		
		DS 4400	4				
		THTR 1170	1				
		Linguistic structure	4				
		0		17		8	

Year 4			
Fall	Hours	Spring	Hours
Co-op		DS 4900	4
		Khoury elective	4
		LING lab (or directed study)	4

LING seminar	4
0	16

Total Hours: 134

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 3200	4				
CS 1800 and CS 1802	5	LING 2350	4				
LING 1150	4	PSYC 1101	4				
ENGW 1111	4						
		19		17		0	

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	DS 3000	4				
LING 3412	4	PSYC 2320	4				
PSYC 3464	4	Linguistic structure	4				
		Elective	4				
		16		17		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistic structure	4	Elective	4	Co-op	0
		DS 4300	4	Elective	4		
		DS 4200	4				
		ENGW 3302	4				
		THTR 1170	1				
		0		17		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4400	4	Elective	4	Co-op	0
		CS 4120	4	Elective	4		
		Linguistic structure	4				
		LING lab (or directed study)	4				
		0		16		8	

Year 5			
Fall	Hours	Spring	Hours
Co-op	0	DS 4900	4
		LING seminar	4
		LING elective	4

Khoury elective	4
0	16

Total Hours: 134

## Data Science and Mathematics, BS

The data science and mathematics combined major combines computer science, data science, and mathematics into an integrated curriculum. The program provides the rigorous theoretical background necessary for success in the data science field.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2810	Mathematics of Data Models	4
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4900	Data Science Senior Project	4

### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS,CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Mathematics Courses

Code	Title	Hours
<b>Problem-Solving Requirement</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering (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 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math Requirement</b>		
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4
<b>Mathematics Elective Requirement</b>		
Complete four courses in the following range:		16
MATH 3001 to MATH 4999 but not MATH 4000		

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
DS 4400	Machine Learning and Data Mining 1	4

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning



- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

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

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	
CS 1200	1	CS 2510 and CS 2511	5	MATH 2321	4	
CS 1800 and CS 1802	5	MATH 1342	4	CS 3500	4	
CS 2500 and CS 2501	5	MATH 1365	4			
MATH 1341	4	Elective	4			
ENGW 1111	4					
19		17		8		
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
MATH 2331	4	CS 1210	1	MATH 3081	4	Co-op
MATH 2341	4	MATH 3527	4	Elective	4	
CS 3200	4	CS 2810	4			
DS 3000	4	DS 4200	4			
		MATH elective	4			
16		17		8		0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		DS 4300	4	ENGW 3302	4	Co-op
		DS 4400	4	Elective	4	
		MATH 3175	4			
		MATH elective	4			
		THTR 1170	1			
0		17		8		0
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		DS 4900	4	Elective	4	
		Khoury elective	4	Elective	4	
		MATH elective	4			
		MATH elective	4			
0		16		8		0

MATH 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
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation
CS 2500 and CS 2501	5	MATH 1342	4			
MATH 1341	4	MATH 1365	4			
ENGW 1111	4	Elective	4			
CS 1200	1					
19		17		0		0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3500	4	CS 1210	1	Vacation	0	Co-op
MATH 2321	4	CS 3200	4			
DS 3000	4	CS 2810	4			
MATH 2341	4	MATH 2331	4			
		MATH 3081	4			
16		17		0		0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	MATH 3175	4	ENGW 3302	4	Co-op
		DS 4200	4	Elective	4	
		DS 4300	4			
		THTR 1170	1			
		Elective	4			
0		17		8		0
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	MATH 3527	4	Elective	4	Co-op
		DS 4400	4	Elective	4	
		MATH elective	4			
		MATH elective	4			
0		16		8		0
Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	DS 4900	4			
		Khoury elective	4			
		MATH elective	4			
		MATH elective	4			
0		16				

Total Hours: 134

## Data Science and Physics, BS

The data science and physics combined major brings together computer and data science, physics, and mathematics. The computer science and mathematics requirements serve as a foundation for both data science and physics. From hands-on experience with sophisticated physics instruments, to mathematical theory, to the latest computational innovations, our interdisciplinary approach is designed to prepare students for the myriad challenges in today's rapidly changing world.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Computer Science Senior Seminar</b>		
THTR 1170	The Eloquent Presenter	1
<b>Physics Courses</b>		
Code	Title	Hours
<b>Required Courses</b>		
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5

PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5
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### Intermediate Physics

PHYS 2303	Modern Physics	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4

### Advanced Physics

PHYS 3600	Advanced Physics Laboratory	4
PHYS 4115 or PHYS 5116	Quantum Mechanics I Complex Networks and Applications	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Electives

Code	Title	Hours
<b>Khoury Elective</b>		

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

### Physics Elective

Complete one course not already required in the following range:

PHYS 3000 to PHYS 5999

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3307 or ENGW 3315	Advanced Writing in the Technical Professions Advanced Writing in the Sciences Interdisciplinary Advanced Writing in the Disciplines	4

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Additional Mathematics Requirements</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

### Integrative Course and Capstone

Code	Title	Hours
PHYS 5318	Principles of Experimental Physics	4

### Required General Electives

Code	Title	Hours
Complete 16 credits of general electives.		16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

135 total semester hours required

### Plan of Study

Sample Patterns:

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

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0
CS 1800 and CS 1802	5	MATH 1342	4		
CS 2500 and CS 2501	5	PHYS 1165 and PHYS 1166 and PHYS 1167	5		
PHYS 1161 and PHYS 1162 and PHYS 1163	5	ENGW 1111	4		
MATH 1341	4				
		20	18	0	0
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 3500	4	MATH 2341	4	CS 3200	4
PHYS 2303	4	PHYS 3601	4	MATH 3081	4
DS 3000	4	DS 4200	4		

MATH 2321	4	General elective	4		
		CS 1210	1		
		16	17	8	0
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		PHYS 3602	4	PHYS 3600	4
		PHYS 4305	4	PHYS 3603	4
		DS 4300	4		
		General elective	4		
		0	16	8	0
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		DS 4400	4	Vacation	0
		PHYS 4115 or 5116	4		
		ENGW 3307	4		
		THTR 1170	1		
		Khoury elective	4		
		0	17	0	0
Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		PHYS 5318	4		
		PHYS XXXX advanced physics elective	4		
		General elective	4		
		General elective	4		
		0	16		

Total Hours: 136

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

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
CS 1200	1	CS 2510 and CS 2511	5	MATH 2331	4
CS 1800 and CS 1802	5	MATH 1342	4	General elective	4
CS 2500 and CS 2501	5	PHYS 1165 and PHYS 1166 and PHYS 1167	5		
PHYS 1161 and PHYS 1162 and PHYS 1163	5	ENGW 1111	4		
MATH 1341	4				
		20	18	8	8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	CS 3200	4	Co-op	0
DS 3000	4	DS 4200	4	MATH 3081	4		
PHYS 2303	4	ENGW 3307	4				
General elective	4	PHYS 3601	4				
		General elective	4				
		16	17		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHYS 3602	4	PHYS 3600	4	Co-op	
		PHYS 4305	4	PHYS 3603	4		
		DS 4300	4				
		Khoury elective	4				
		THTR 1170	1				
		0	17		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4				
		PHYS 5318	4				
		PHYS 4115 or 5116	4				
		PHYS XXXX advanced physics elective	4				
		0	16				

Total Hours: 136

## Data Science and Psychology, BS

The psychology and data science combined major offers an integrative curriculum in the study of mind, brain, and behavior and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The study of psychology draws upon empirical research with both humans and animals to investigate and seek explanations for the behavior and mental life of individuals and develop assessment tools and treatment options for addressing clinical problems. In this program, students have an opportunity to augment such knowledge with skills in big data analysis, data science, and data analytics.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or PSYC 1000	First Year Seminar Psychology at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
or EESC 2000	Professional Development for Co-op	

<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4

<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4

<b>Supporting Course for Data Science</b>		
THTR 1170	The Eloquent Presenter	1

**Khoury Elective**  
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Computer Science Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		
ENGW 3302	Advanced Writing in the Technical Professions	4
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Psychology Requirements**

Code	Title	Hours
<b>Foundations of Psychology</b>		
PSYC 1101	Foundations of Psychology	4
<b>Statistics in Psychological Research</b>		
PSYC 2320	Statistics in Psychological Research	4
<b>Mathematics Foundations</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Personality/Social Basis of Behavior</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Cognitive/Biological Basis of Behavior</b>		
Complete two of the following:		8
PSYC 3450	Learning and Motivation	
or PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Laboratory</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	
<b>Psychology Electives</b>		
Complete two of the following:		8
PSYC 2370 to PSYC 5999		

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	
IS 4300	Human Computer Interaction	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Psychology GPA Requirement**

Minimum 2.000 GPA required in all PSYC courses

**Program Requirement**

133 total semester hours required

**Plan of Study****Sample Patterns:****Five Years, Three Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	PSYC 2320	4				
CS 2500 and CS 2501	5	Personality/ social basis of behavior 1	4				
PSYC 1101	4	General elective	4				
ENGW 1111	4						
		19		17		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation		Co-op	
MATH 1341	4	CS 1210	1				
Cognitive/ biological basis of behavior 1	4	Cognitive/ biological basis of behavior 2	4				
General elective	4	Personality/ social basis of behavior 2	4				
		General elective	4				
		16		17		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	General elective	4	Co-op	
		CS 3200	4	PSYC elective	4		

	PSYC laboratory	4				
	THTR 1170	1				
	General elective	4				
		0	17	8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	ENGW 3302	4	Co-op	
		DS 4400	4	PSYC elective	4		
		General elective	4				
		PSYC seminar	4				
		0	16	8		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		DS 4900	4
		Integrative requirement	4
		Khoury Elective	4
		General elective	4
		0	16

Total Hours: 134

### Four Years, Two Co-ops

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	General elective	4
CS 1800 and CS 1802	5	PSYC 2320	4	General elective	4	General elective	4
CS 2500 and CS 2501	5	Personality/ social basis of behavior 1	4				
PSYC 1101	4	General elective	4				
ENGW 1111	4						
	19		17		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	PSYC elective	4	Co-op	
DS 3000	4	DS 4200	4	General elective	4		
Cognitive/ biological basis of behavior 1	4	Personality/ social basis of behavior 2	4				
MATH 1341	4	Cognitive/ biological basis of behavior 2	4				

	General elective	4			
	16	17	8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	PSYC elective	4	Co-op	
		DS 4400	4	ENGW 3302	4		
		PSYC laboratory	4				
		THTR 1170	1				
		General elective	4				
		0	17	8		0	

**Year 4**

Fall	Hours	Spring	Hours
Co-op		DS 4900	4
		Khoury elective	4
		PSYC seminar	4
		Integrative requirement	4
		0	16

Total Hours: 134

### Accelerated Bachelor/Graduate Degree Programs

Khoury College of Computer Sciences offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

### College of Engineering

Website (<http://www.coe.neu.edu>)

**Jacqueline Isaacs**, PhD, Interim Dean

**Susan Freeman**, PhD, Associate Dean for Undergraduate Education

**Richard Harris**, MS, Assistant Dean for Academic Scholarship, Mentoring, and Outreach; Director of Multicultural Engineering

**Candace A. Martel**, MEd, Assistant Dean; Director of Undergraduate Academic Advising

**Rachelle Reisberg**, MS, Assistant Dean for Engineering Enrollment and Retention; Director of Women in Engineering

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. There are also a number of combined majors within the college and between the College of Engineering and other colleges that students can pursue. Five-year and four-year options are available to complete the Bachelor of Science degree program. The five-year option includes 18 months of cooperative education work experience, and the four-year option includes 12 months of cooperative education experience. 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.

## Academic Standards

### ACADEMIC PROGRESSION STANDARDS

In addition to meeting university progression standards, it is expected that full-time engineering students enroll in four courses with appropriate labs and recitations and successfully complete at least 12 semester hours each academic semester with an acceptable GPA as noted below. Any exceptions to the course load requirement must be approved in writing by the student's academic advisor prior to the start of each semester.

### GPA REQUIREMENTS FOR GRADUATION

A minimum cumulative GPA requirement of 2.000 in major (department) courses and a minimum cumulative GPA requirement of 2.000 overall are required for graduation.

### CRITERIA FOR ACADEMIC PROBATION

Full-time students in the College of Engineering will be placed on academic probation effective for the following academic semester for any of the reasons noted below:

#### *First-year Students:*

- Not maintaining a semester GPA of at least a 1.800 at the end of each full-term semester (fall, spring) of the first-year curriculum
- Not earning at least 12 semester hours at the end of each semester of the first-year curriculum
- Not earning at least 24 semester hours at the end of the two full-term semesters (fall, spring) of the first-year curriculum

#### *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 below 1.800
- Not following a program of study approved by the student's academic advisor

A notation of the academic probation action will appear on the internal record but not on the permanent transcript.

### CRITERIA FOR ACADEMIC DISMISSAL

Students who have below a 1.000 GPA in any academic term following their first semester or cumulatively may be dismissed, regardless of their prior academic status, at the discretion of the college.

Full-time students on academic probation in the College of Engineering are eligible for academic dismissal from the university for any of the reasons noted below:

- Earning a GPA below 1.800 in a current term (fall, spring, summer, summer 1, or summer 2)
- Completing fewer than 12 semester hours in a full-term (fall, spring) academic semester
- Not following a program of study approved by the student's academic advisor
- Remaining on academic probation after two full-term (fall, spring) academic semesters

Notation of this academic dismissal action will appear on the permanent transcript.

### PASS/FAIL 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. A maximum of one pass/fail course is allowed per semester. Only general electives taken outside the College of Engineering may be taken on a pass/fail grading basis.

### GRADUATION REQUIREMENTS

The college reserves the right to amend programs, courses, and degree requirements to fulfill its educational responsibility to respond to relevant changes in the field.

Students must complete all of the requirements in the degree program in which they are candidates. Degree requirements are based upon the year of graduation, determined by the date of entry or reentry into the College of Engineering. Degree requirements and the year of graduation for a degree candidate who fails to make normal academic progress will be subject to review and possible change.

### PROGRESSION TOWARD FULFILLMENT OF DEGREE REQUIREMENTS

Students are expected to develop and follow a program of study outlining scheduled coursework to complete degree requirements. If changes to the year of graduation are to be made after completion of the third year of study in the major program curriculum, revised plans should be submitted to an academic advisor for review and approval. Students pursuing a minor course of study should declare their minor no later than the third year.

## General Engineering and First Year Engineering

General engineering encompasses the common curriculum for several interdisciplinary initiatives and programs for engineering students: the first-year engineering program, the entrepreneurial engineering minor, and some of the college's Dialogues of Civilizations experience courses.

### First-Year Engineering Program

With a distinct focus on first-year engineering education, the first-year engineering program at Northeastern University prepares undergraduate engineers with the fundamental building blocks needed for all College of Engineering majors. Emphasizing hands-on, integrated design, our program leverages a state-of-the-art makerspace to provide our students with an immersive experience into the College of Engineering community. Through the lens of the engineering design process, the program weaves engineering ethics and research into designs created with CAD and software development programs used by leading industry engineering firms. Student designs are brought to life through our makerspace's extensive fabrication tools with support from our upperclass engineering student mentors. Dedicated first-year teaching faculty with expertise in engineering pedagogical research and a diverse array of engineering backgrounds focus on creating and evolving teaching practices to ensure that the program scaffolds students in an authentic and fully integrated manner to excel in the rest of their academic scholarship.

### Mission of the Department

The mission for the first-year engineering program is to inspire our students in their pursuit of an engineering education by fostering a diverse and inclusive learning community centered around project-based experiential learning.

### Program Values

To accomplish our mission, we aim to:

- Provide state-of-the-art engineering education informed by best practices in *industry* and *pedagogical research*.
- Introduce the fundamentals of problem solving while cultivating *systems thinking*.
- Present engineering problems with *authentic complexities* that promote value-sensitive design and social and environmental justice.
- Facilitate a *hands-on and teamed* learning experience through access of modern design and fabrication tools in our continually evolving makerspace.
- Provide our students with the skills needed to function as independent, *lifelong learners*.

## Interdisciplinary Minors

- Entrepreneurial Engineering, Minor (p. 415)
- Design and Innovation in Engineering, Minor (p. 416)
- Materials Science and Engineering, Minor (p. 416)
- Sustainable Energy Systems, Minor (p. 417)

## Entrepreneurial Engineering, Minor

The entrepreneurial engineering minor is designed for the technology-minded entrepreneur who seeks to understand disciplinary fundamentals, assess market needs, create technologies, and determine how to manufacture solutions sustainably and economically. The course requirements for the minor are designed to incorporate both engineering elements (product development and prototyping) and creative elements (product design), along with market and societal considerations (customer discovery and needs assessment). The elective option provides an opportunity to specialize in one of three areas: manufacturing, design, or venture creation. Versions of this minor are available for both engineering and nonengineering majors. Sign up for the minor by contacting your academic advisor.

### Minor Requirements

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

### Required Core Courses

Code	Title	Hours
<b>For Undergraduates in the College of Engineering</b>		
GE 5010	Customer-Driven Technical Innovation for Engineers	4
GE 5020	Engineering Product Design Methodology	4
GE 5030	Iterative Product Prototyping for Engineers	4
GE 5100	Product Development for Engineers	4
<b>For Undergraduates outside the College of Engineering</b>		
GE 1110	Engineering Design	4
Complete three of the following:		
GE 5010	Customer-Driven Technical Innovation for Engineers	4
GE 5020	Engineering Product Design Methodology	4
GE 5030	Iterative Product Prototyping for Engineers	4
GE 5100	Product Development for Engineers	4

### Elective

Code	Title	Hours
Complete one of the following:		
<i>Venture Creation</i>		
ENTR 2303	Marketing Strategies for Startups	
ENTR 3305	Business Model Innovation for Entrepreneurs	
ENTR 3306	Global Entrepreneurship	
ENTR 3330	Lean Design and Rapid Prototyping	

ENTR 4501	Advanced Studies in Entrepreneurial Startups
ENTR 4510	Management Consulting Abroad
<i>Design</i>	
ARTE 3901	Art and Design Special Topics
ARTF 1122 and ARTF 1123	Color and Composition and Color and Composition Tools
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools
ARTG 1250	Design Process Context and Systems
ARTG 3462	Experience Design 1
ARTG 3463	Experience Design 2
<i>Manufacturing</i>	
IE 2310	Introduction to Industrial Engineering
IE 4512	Engineering Economy
IE 4525	Logistics and Supply Chain Management
IE 4530	Manufacturing Systems and Techniques
IE 4600	Systems Design for Sustainability

### GPA Requirement

2.000 GPA required in the minor

### Design and Innovation in Engineering, Minor

The design and innovation in engineering minor is designed for nonengineering undergraduate students who wish to explore and develop working solutions as an engineer to the National Academy of Engineering Grand Challenges of the 21st century. The course requirements for the minor are designed to expose the student to the engineering elements necessary to solve the important problems facing society today and include value-sensitive design as well as the ethical and professional obligations of an engineer. The elective options offer a high degree of flexibility and exposure to the engineering design process, CAD, programming, micro-controllers-based projects, and mathematical computation. The aforementioned skills will be used for making interactive open-ended projects that address one of the NAE Grand Challenges. This provides more depth within the student's discipline and improves future career opportunities. Students have an opportunity to model and analyze designs, applying many techniques engineers utilize to create and test designs toward implementation. The student, upon successful completion of the minor, will be able to apply value-sensitive design principles to determine a societal need and propose and build or develop a solution. Students apply teamwork, project management, CAD, and algorithmic thinking to the conception of a particular solution and deliver effective team presentations on engineering projects and topics.

### Minor Requirements

*Note:* This minor is for nonengineering majors.

### Required Courses

*Note:* For students who were previously in the College of Engineering, Cornerstone of Engineering 1 (GE 1501) and Cornerstone of Engineering 2 (GE 1502) may be substituted for Engineering Design (GE 1110) and Engineering Problem Solving and Computation (GE 1111).

Code	Title	Hours
GE 1110	Engineering Design	4
GE 1111	Engineering Problem Solving and Computation	4
GE 2500	Design Analysis and Innovation	4

### Elective

Code	Title	Hours
Complete one of the following:		4
ARTG 1250	Design Process Context and Systems	
ARTG 3250	Physical Computing	
ARTG 3462	Experience Design 1	
EECE 2160	Embedded Design: Enabling Robotics	
ENTR 2301	Innovation!	
GE 1201	Alternative Energy Technologies Abroad	
GE 2010	Introduction to Customer-Driven Technical Innovation: Silicon Valley	
GE 2030	Introduction to Product Prototyping: Silicon Valley	
GE 2300	Engineering Structure and Function: Principles of Design in Nature	
GE 2361	Mathematical Methods for Engineers	
GE 3300	Energy Systems: Science, Technology, and Sustainability	
GE 4993	Independent Study	
IE 3412	Engineering Probability and Statistics	
IE 2310	Introduction to Industrial Engineering	
IE 4510	Simulation Modeling and Analysis	

### GPA Requirement

Minimum 2.000 GPA required in the minor

### Credit Requirement

16 hours required

### Materials Science and Engineering, Minor

#### Materials Science and Engineering

The study of materials science and engineering has spurred breakthroughs in applications ranging from artificial limbs and organs, to space travel vehicles, to personal MP3 players. For example, the discovery of buckyballs and carbon nanotubes has led to the development of an unprecedented reduction in size of prototype electronic components and points the way to tomorrow's electronic technologies. Porous nanostructures of biocompatible materials are studied for targeted drug delivery within the body. The integration of polymers and semiconductors is used to create efficient, usable solar cells to reduce our dependence on fossil fuels. There are many more examples of both existing technologies and current research areas involving materials science and engineering that impact everyday life both today and in the future.

The minor in materials science and engineering is open to all students of the College of Engineering whose science and technical interests involve the design, processing, and optimization of engineering materials. Since the materials interests may vary across the engineering disciplines, the minor is composed of an interdisciplinary selection of courses that offer a high degree of flexibility to the student. The fundamental goals of the program are to offer the student a broad interdisciplinary program

that includes a basic background in the relevant aspects of materials science and the engineering applications of materials. The objectives are to serve the needs of the chemical, civil, electrical, and mechanical engineering departments in providing a vehicle to expose students to materials science and engineering. Particular focus areas include electronic materials and processing for device applications; strength, wear, and corrosion-resistant coatings; molecular-level design of thin films and nanostructures; polymers and biomedical applications; and steels, concretes, and space-based structures.

### Minor Requirements

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

### Required Course

Code	Title	Hours
ME 2340	Introduction to Material Science	4

### Electives

Code	Title	Hours
Complete three courses from the following disciplines:		11-13

#### Bioengineering

BIOE 5820 Biomaterials

#### Chemical Engineering

CHME 5105 Materials Characterization Techniques

CHME 5160 Drug Delivery: Engineering Analysis

CHME 5631 Biomaterials Principles and Applications

CHME 5632 Advanced Topics in Biomaterials

CHME 5683 Introduction to Polymer Science

#### Civil and Environmental Engineering

CIVE 2260 Materials for the Built Environment and CIVE 2261 and Lab for CIVE 2260

CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure

#### Electrical and Computer Engineering

EECE 3392 Electronic Materials

EECE 5606 Micro- and Nanofabrication

EECE 7296 Electronic Materials (With Instructor Permission)

#### Materials Engineering

MATL 5380 Particulate Materials Processing

MATL 6250 Soft Matter (With Instructor permission)

MATL 6270 Principles, Devices, and Materials for Energy Storage and Energy Harvesting (With Instructor permission)

MATL 6285 Structure, Properties, and Processing of Polymeric Materials (With Instructor Permission)

MATL 6290 Fundamentals of Nanostructured Materials (With Instructor permission)

#### Mechanical and Industrial Engineering

ME 4630 Ceramic Science and Engineering

ME 4640 Mechanical Behavior and Processing of Materials

ME 5600	Materials Processing and Process Selection
ME 5620	Fundamentals of Advanced Materials
ME 5645	Environmental Issues in Manufacturing and Product Use

#### Engineering Interdisciplinary

ENGR 5670 Sustainable Energy: Materials, Conversion, Storage, and Usage

#### Chemistry and Chemical Biology

CHEM 3501 Inorganic Chemistry

CHEM 5651 Materials Chemistry of Renewable Energy

Or any advisor-approved course or directed study

### Capstone Design

Code	Title	Hours
Complete one of the following major capstone requirements: <sup>1</sup>		4-5
BIOE 4792	Capstone Design 2	
CHME 4703	Capstone Design 2: Chemical Process Design	
CIVE 4765	Senior Design Project—Environmental	
CIVE 4767	Senior Design Project—Structural	
CIVE 4768	Senior Design Project—Transportation	
EECE 4792	Electrical and Computer Engineering Capstone 2	
MEIE 4702	Capstone Design 2	

### GPA Requirement

2.000 GPA required in the minor

<sup>1</sup> Students may complete 4 semester hours of elective 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 may not be used to fulfill minor requirements. However, one engineering course from this minor with course number 4000 to 5999 in the student's major can be used as a technical elective or advanced engineering elective to fulfill the student's major requirements. See curriculum below for details.

**Core Energy Science, Technology Courses**

Code	Title	Hours
Complete two of the following: 8		
CHME 2320	Chemical Engineering Thermodynamics 1	
or ME 2380	Thermodynamics	
GE 3300	Energy Systems: Science, Technology, and Sustainability	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
ENSY 5000	Fundamentals of Energy System Integration	

**Environmental/Economics/Policy Courses**

Code	Title	Hours
Complete one of the following: 4		
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
ENVR 2515	Sustainable Development	
FINA 2720	Sustainability in the Business Environment	
ME 5645	Environmental Issues in Manufacturing and Product Use	
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	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
ENSY 5000	Fundamentals of Energy System Integration	
GE 3300	Energy Systems: Science, Technology, and Sustainability	
IE 4512	Engineering Economy (IE students may not count this course toward a sustainable energy minor if used to fulfill a major requirement.)	
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

Details about double-counting restrictions between this minor and Engineering major requirements are as follows:

- Civil engineering, environmental engineering and environmental engineering/health science students may not count Energy Systems: Science, Technology, and Sustainability (GE 3300) toward the sustainable energy systems minor if this course is used to fulfill major requirements.
- Chemical engineering students and mechanical engineering students may not count Chemical Engineering Thermodynamics 1 (CHME 2320) or Thermodynamics (ME 2380) toward the sustainable energy systems minor since these courses are required in their respective majors.
- Chemical engineering students may not count Conservation Principles in Chemical Engineering (CHME 2308) toward the sustainable energy systems minor since this course is required in their major.
- Industrial engineering students may not count Engineering Economy (IE 4512) toward the sustainable energy systems minor since this course is required in their major.

**Bioengineering**

Website (<http://www.bioe.neu.edu>)

**Lee Makowski, PhD**

Professor and Chair  
206 Interdisciplinary Science and Engineering Complex  
617.373.7805

The Department of Bioengineering offers students a broad education built on fundamentals in science, mathematics, and engineering, with a focus on the biological applications of engineering. The program is designed to provide a rigorous engineering training along with a comprehensive understanding of the biological constraints intrinsic to designing artificial systems to interface with, augment, replace, repair, or monitor living systems. These constraints depend on the properties of the biological system involved and the functionality that is being created. The living system may be the human body; an ecosystem; or, more broadly, a bioreactor, tissue culture system, or any system with living components. The presence of naturally occurring biological tissue places special constraints on the design and implementation of artificial constructs and their interface to living systems. Bioengineers are engineers with comprehensive understanding of the engineering requirements intrinsic to working within a biological context.

Bioengineering is a relatively new field driven by the recognition that engineering of biological systems or systems that interface with living systems requires a multidisciplinary approach that takes into account the mechanical, electrical, chemical, and materials properties of the biological system. With that in mind, the bioengineering program has been designed to provide a rigorous engineering education



that endows a broad understanding of the quantitative analysis of biological systems and a deep expertise in one of four areas of bioengineering. The curriculum is structured around a core of six courses that quantitatively analyze biological systems from multiple points of view. The core provides the fundamentals of quantitative physiology, electrical engineering in the context of excitable tissues; basics of mechanical engineering in the context of the musculoskeletal system; and thermodynamics, heat transfer, and fluids mechanics within the context of physiological systems. On completion of the core, students choose one of three concentrations (cell and tissue engineering, biomechanics, or biomedical devices and bioimaging), which provides the opportunity to develop a deep level of expertise in an important area of bioengineering. The curriculum culminates with a two-semester capstone course to provide experience in design and implementation of a novel bioengineering project.

### Mission of the Department

The program is committed to providing a multidisciplinary education, making connections from the classroom and laboratory to research, co-op, and 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. A PlusOne, accelerated Master of Science program is also available in the following Master of Science disciplines: cell and tissue engineering, biomedical devices and bioimaging, 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. 419)
- Bioengineering and Biochemistry (p. 423)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Bioengineering, BSBioE

Bioengineering is engineering in a biological context such as the human body, an ecosystem, or a bioreactor. In every case, the interface between engineered and biological systems places unique constraints on the design and implementation of devices, instruments, or implants. These depend on the properties of the biological system involved and the functionality that is being created.

The interface of engineering and medicine as embodied in bioengineering will be one of the most exciting endeavors and greatest adventures of the 21st century. Job opportunities are expected to expand dramatically with a focus on development of entirely new classes of products, instrumentation, and implants. The impact to human health will be extraordinary.

Bioengineering is intrinsically multidisciplinary and it is essential that students learn the languages used by multidisciplinary teams. To that end, our curriculum is structured around a core of six courses that analyze biological systems from every possible quantitative point of view. On the completion of the core, students choose one of three concentrations, which provides the opportunity to develop a deep level of expertise in a specific area of bioengineering.

Bioengineering students will have unique opportunities in the classroom, research labs, and experiential learning. The projects that they may be able to contribute to include bio-bandages that monitor bacterial growth or that help damaged ligaments heal faster; sheets of cells folded like origami to form a working kidney; and new materials that—like a leaf in the sun—automatically sense and adapt to changes in the environment.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Complete all Engineering courses with a minimum of 38 semester hours.

Code	Title	Hours
<b>Required Engineering</b>		
BIOE 2355	Quantitative Physiology for Bioengineers	4



BIOE 2365 and BIOE 2366	Bioengineering Measurement, Experimentation, and Statistics and Lab for BIOE 2365	5
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BIOE 2350	Biomechanics	4
BIOE 3210	Bioelectricity	4
BIOE 3310	Transport and Fluids for Bioengineers	4
BIOE 3380	Biomolecular Dynamics and Control	4

**Bioengineering Capstone**

BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2
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**Concentration**

Complete one concentration.

- Cell and Tissue Engineering (p. )
- Biomechanics (p. 420)
- Biomedical Devices and Bioimaging (p. )

**Concentration in Cell and Tissue Engineering**

Code	Title	Hours
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**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 5060	Special Topics in Bioengineering	
BIOE 5115	Dynamical Systems in Biological Engineering	
BIOE 5440	The Cell as a Machine	
BIOE 5450	Stem Cell Engineering	
BIOE 5650	Multiscale Biomechanics	
BIOE 5656	Fields, Forces, and Flows in Biological Systems	
BIOE 5820	Biomaterials	
CHME 5630	Biochemical Engineering	

**Concentration in Biomechanics**

Code	Title	Hours
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**Required Courses**

Complete three of the following courses:

BIOE 5630	Physiological Fluid Mechanics	4
BIOE 5640	Computational Biomechanics	4
BIOE 5650	Multiscale Biomechanics	4
ME 5665	Musculoskeletal Biomechanics	4

**Elective Courses**

Complete two of the following. Any course on the required course list not used towards the core requirement may also be taken. 8

BIOE 4991	Research	
BIOE 5060	Special Topics in Bioengineering	
BIOE 5115	Dynamical Systems in Biological Engineering	
BIOE 5440	The Cell as a Machine	
BIOE 5656	Fields, Forces, and Flows in Biological Systems	
BIOE 5820	Biomaterials	
ME 4508	Mechanical Engineering Computation and Design	
ME 4555	System Analysis and Control	

**Concentration in Biomedical Devices and Bioimaging**

Code	Title	Hours
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**Required Courses**

Complete the following:

BIOE 5800	Systems, Signals, and Controls for Bioengineers	4
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Complete two of the following:

BIOE 5235	Biomedical Imaging	4
BIOE 5250	Design, Manufacture, and Evaluation of Medical Devices	4
BIOE 5810	Design of Biomedical Instrumentation	4

**Elective Courses**

Complete two of the following. Any course on the required course list not used towards the core requirement may also be taken. 8

BIOE 4991	Research	
BIOE 5060	Special Topics in Bioengineering	
BIOE 5115	Dynamical Systems in Biological Engineering	
BIOE 5820	Biomaterials	
BIOE 5850	Design of Implants	
BIOL 5581	Biological Imaging	
EECE 2530	Fundamentals of Electromagnetics	
EECE 2750	Enabling Engineering	
EECE 3468	Noise and Stochastic Processes	
EECE 4626	Image Processing and Pattern Recognition	
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	
ME 4508	Mechanical Engineering Computation and Design	

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
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**Required Mathematics/Science**

BIOL 1115 and BIOL 1116 or BIOL 1111 and BIOL 1112	General Biology 1 for Engineers and Lab for BIOL 1115 General Biology 1 and Lab for BIOL 1111	5
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CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1171 and PHYS 1172 and PHYS 1173	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171	5
or PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1175 and PHYS 1176 and PHYS 1177	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175	5
or PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	
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**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	
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**Writing Requirements**

Code	Title	Hours
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28SH of academic, nonremedial, nonrepetitive courses.		28

**Major GPA Requirement**

2.000 minimum required in BIOE courses

**Program Requirement**

135 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
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	BIOL 1115 or 1111 (ND)	4	Vacation	0
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	BIOL 1116 or 1112	1		
CHEM 1153	0	PHYS 1171 or 1151 (ND)	3	General Elective	4		
ENGW 1111 (WF)	4	PHYS 1172 or 1152 (AD)	1				
GE 1000	1	PHYS 1173 or 1153	1				
GE 1501	4	General Elective	4				
MATH 1342 (FQ)	4						
		21			17		
						9	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2365 (AD, WI)	4	BIOE 2350	4	BIOE 3310	4	Co-op	0
BIOE 2366	1	BIOE 2355	4	General Elective	4		
MATH 2341	4	ENCP 2000	1				
PHYS 1175 or 1155 (ND)	3	General Elective	4				
PHYS 1176 or 1156 (AD)	1	General Elective	4				
PHYS 1177 or 1157	1						
General Elective	4						
		18			17		
						8	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOE 3210	4	BIOE 4790 (EI, CE, WI)	4	Co-op	0
		BIOE 3380	4	General Elective	4		
		ENCP 3000	1				
		BIOE Concentrator	4				

	BIOE Concentration	4			
		0	17	8	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	0	BIOE 4792 (EI, CE, WI)	4		
ENGW 3302 or 3315 (to be taken online) (WD)	4	BIOE Concentration	4		
		BIOE Concentration	4		
		BIOE Concentration	4		
	4		16		0

Total Hours: 135

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

<b>Year 1</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	BIOL 1115 or 1111 (ND)	4
CHEM 1151 (ND)	4	MATH 2341	4	BIOL 1116 or 1112	1
CHEM 1153	0	PHYS 1171 or 1151 (ND)	3	PHYS 1175 or 1155 (ND)	3
ENGW 1111 (WF)	4	PHYS 1172 or 1152 (AD)	1	PHYS 1176 or 1156 (AD)	1
GE 1000	1	PHYS 1173 or 1153	1	PHYS 1177 or 1157	1
GE 1501	4	General Elective	4		
MATH 1342 (FQ)	4				
	21		17	10	0

<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
BIOE 2350	4	Co-op		Co-op	4
BIOE 2365 (AD, WI)	4			General Elective	4
BIOE 2366	1				
ENCP 2000	1				
MATH 2321 (FQ)	4				
General Elective	4				
	18		0	0	8

<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
BIOE 2355	4	ENGW 3302 or 3315 (to be taken online) (WD)	4	Co-op	4
BIOE 3210	4	Co-op		BIOE 4790 (EI, CE, WI)	4
BIOE Concentration	4				
General Elective	4				
	16		4	0	8

<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
BIOE 3380	4	BIOE Concentration	4		
BIOE 4792 (EI, CE, WI)	4	BIOE Concentration	4		
ENCP 3000	1	BIOE Concentration	4		
BIOE Concentration	4	General Elective	4		
General Elective	4				
	17		16		

Total Hours: 135

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

<b>Year 1</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	4
CHEM 1153	0	MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1171 or 1151 (ND)	3		
GE 1000	1	PHYS 1172 or 1152 (AD)	1		
GE 1501	4	PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4	General Elective	4		
	17		17	0	0

<b>Year 2</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
BIOE 2365 (AD, WI)	4	BIOE 2350	4	Vacation	4
BIOE 2366	1	BIOE 2355	4	Co-op	4
BIOL 1115 or 1111 (ND)	4	ENCP 2000	1		
BIOL 1116 or 1112	1	MATH 2341	4		
MATH 2321	4	General Elective	4		
PHYS 1175 or 1155 (ND)	3				

PHYS 1176 or 1156 (AD)	1				
PHYS 1177 or 1157	1				
	19	17	0	0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BIOE 3210	4	BIOE 3310	4	Co-op	
		BIOE 3380	4	General Elective	4		
		ENGW 3302 or 3315 (WD)	4				
		BIOE Concentrator	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ENCP 3000	1	BIOE 4790 (EI, CE, WI)	4	Co-op	
		BIOE Concentrator	4	General Elective	4		
		BIOE Concentration	4				
		BIOE Concentrator	4				
		General Elective	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		BIOE 4792 (EI, CE, WI)	4
		BIOE Concentrator	4
		General Elective	4
		General Elective	4
	0		16

Total Hours: 135

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation		Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1171 or 1151 (ND)	3				
GE 1000	1	PHYS 1172 or 1152 (AD)	1				
GE 1501	4	PHYS 1173 or 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2365 (AD, WI)	4	Co-op		Co-op		Vacation	
BIOE 2366	1						
BIOL 1115 or 1111 (ND)	4						
BIOL 1116 or 1112	1						
ENCP 2000	1						
MATH 2321	4						
PHYS 1175 or 1155 (ND)	3						
PHYS 1176 or 1156 (AD)	1						
PHYS 1177 or 1157	1						
		20		0		0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2350	4	Co-op		Co-op		BIOE 3310	4
BIOE 2355	4					General Elective	4
MATH 2341	4						
General Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 3210	4	Co-op		Co-op		BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4					General Elective	4
ENCP 3000	1						
ENGW 3302 or 3315 (WD)	4						
BIOE Concentration	4						
	17		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
BIOE 4792 (EI, CE, WI)	4	BIOE Concentration	4
BIOE Concentrator	4	BIOE Concentrator	4
BIOE Concentration	4	General Elective	4
General Elective	4	General Elective	4
	16		16

Total Hours: 135

### Bioengineering and Biochemistry, BSBioE

This combined major from the College of Engineering and College of Science serves students who wish to develop both a scientific

and an engineering mindset to solve problems in bioengineering and biochemistry. The program includes fundamentals and electives in the science of biochemistry; a complete and rigorous bioengineering core; and a series of molecular, cellular, and tissue engineering courses that allow for synthesis of the two. Successful graduates will earn a Bachelor of Science degree and possess the knowledge, skills, and perspective to pursue careers in academia or industry. Furthermore, this curriculum lines up well with the coursework required to pursue medical (or other clinical) school.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
BIOE 2350	Biomechanics	4
BIOE 2355	Quantitative Physiology for Bioengineers	4
BIOE 2365 and BIOE 2366	Bioengineering Measurement, Experimentation, and Statistics and Lab for BIOE 2365	5
BIOE 3210	Bioelectricity	4
BIOE 3310	Transport and Fluids for Bioengineers	4
BIOE 3380	Biomolecular Dynamics and Control	4
<b>Bioengineering Capstone</b>		
BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

### Concentration

#### *Concentration in Cell and Tissue Engineering*

Code	Title	Hours
<b>Required Courses</b>		
BIOE 5410	Molecular Bioengineering	4
BIOE 5420	Cellular Engineering	4

BIOE 5430	Principles and Applications of Tissue Engineering	4
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### Mathematics/Science Requirement

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOE 1115 and BIOE 1116 or BIOE 1111 and BIOE 1112	General Biology 1 for Engineers and Lab for BIOE 1115 General Biology 1 and Lab for BIOE 1111	5
BIOE 2301 and BIOE 2302	Genetics and Molecular Biology and Lab for BIOE 2301	5
BIOE 3611 and BIOE 3612	Biochemistry and Lab for BIOE 3611	5
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1171 and PHYS 1172 and PHYS 1173 or PHYS 1151 and PHYS 1152 and PHYS 1153	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171 Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1175 and PHYS 1176 and PHYS 1177 or PHYS 1155 and PHYS 1156 and PHYS 1157	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175 Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
<b>Advanced Biology Elective</b>		
Complete one course in the following range:		4
BIOL 2311 to BIOL 5999		
<b>Advanced Chemistry Elective</b>		
Complete one course in the following range:		4
CHEM 2310 to CHEM 5999		
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1	

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1

ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development 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 Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 12 semester hours of academic, nonremedial, nonrepetitive courses.		12

**Integrative Course**

Code	Title	Hours
BIOE 4790	Capstone Design 1	4

**Major GPA Requirement**

2.000 minimum required in BIOE courses

**Program Requirement**

139 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
Students will need to have AP credit for Calc. AB (MATH1341-Calculus 1, 4 SH)	4	GE 1502 (ER)	4	PHYS 1155 or 1175 (ND)	3	Vacation	
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	PHYS 1156 or 1176 (AD)	1		
CHEM 1153	0	PHYS 1171 or 1151 (ND)	3	PHYS 1157 or 1177	1		
ENGW 1111 (WF)	4	PHYS 1172 or 1152 (AD)	1	General elective	4		
GE 1000	1	PHYS 1173 or 1153	1				
GE 1501	4	General elective	4				
MATH 1342 (FQ)	4						
		21			17		
				9			0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2355	4	BIOE 2350	4	CHEM 2313	4	Co-op	
BIOE 2365 (AD, WI)	4	BIOE 3380	4	CHEM 2314	1		
BIOE 2366	1	BIOL 2301 (ND)	4	General elective	4		
BIOL 1115 or 1111 (ND)	4	BIOL 2302 (AD)	1				
BIOL 1116 or 1112	1	CHEM 2311	4				
MATH 2341	4	CHEM 2312	1				
		ENCP 2000	1				
		18			19		
				9			0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BIOE 3210	4	BIOE 3310	4	Co-op	
		BIOE 5410, 5420, or 5430	4	BIOE 4790 (EI, CE, WI)	4		
		BIOE 5420, 5410, or 5430	4				
		BIOL 3611	4				
		BIOL 3612 (WI)	1				
		ENCP 3000	1				
		0			18		
				8			0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		BIOE 4792 (EI, CE, WI)	4
ENGW 3302, 3307, or 3315 (to be taken online) (WD)	4	BIOE 5430, 5410, or 5420	4
		Advanced BIOL elective	4
		Advanced CHEM elective	4
		4	16

Total Hours: 139

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have AP credit for Calc. AB (MATH1341-Calculus 1, 4 SH)	4	GE 1502 (ER)	4	PHYS 1155 or 1175 (ND)	3	Vacation	
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	PHYS 1156 or 1176 (AD)	1		



426 Bioengineering and Biochemistry, BSBioE

CHEM 1153	0	PHYS 1171 or 1151 (ND)	3	PHYS 1157 or 1177	1	
ENGW 1111 (WF)	4	PHYS 1172 or 1152 (AD)	1	General elective	4	
GE 1000	1	PHYS 1173 or 1153	1			
GE 1501	4	General elective	4			
MATH 1342 (FQ)	4					
	21		17		9	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2365 (AD, WI)	4	Co-op		Co-op		CHEM 2313	4
BIOE 2366	1					CHEM 2314	1
BIOL 1115 or 1111 (ND)	4					General elective	4
BIOL 1116 or 1112	1						
CHEM 2311	4						
CHEM 2312	1						
ENCP 2000	1						
MATH 2341	4						
	20		0		0		9

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2350	4	Co-op		Co-op		BIOE 3310	4
BIOE 2355	4	ENGW 3302, 3307, or 3315 (to be taken online) (WD)	4			BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4						
BIOL 2301 (ND)	4						
BIOL 2302 (AD)	1						
ENCP 3000	1						
	18		4		0		8

**Year 4**

Fall	Hours	Spring	Hours
BIOE 3210	4	BIOE 5420, 5410, or 5430	4
BIOE 4792 (EI, CE, WI)	4	BIOE 5430, 5410, or 5420	4
BIOE 5410, 5420, or 5430	4	Advanced BIOL elective	4
BIOL 3611	4	Advanced CHEM elective	4

BIOL 3612 (WI)	1	
	17	16

Total Hours: 139

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1171 or 1151 (ND)	3				
GE 1501	4	PHYS 1172 or 1152 (AD)	1				
GE 1000	1	PHYS 1173 or 1153	1				
MATH 1341 (FQ)	4	General elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2365 (AD, WI)	4	BIOE 2355	4	Vacation	0	Co-op	0
BIOE 2366	1	BIOL 2301 (ND)	4				
BIOL 1115 or 1111 (ND)	4	BIOL 2302 (AD)	1				
BIOL 1116 or 1112	1	CHEM 2311	4				
MATH 2321 (FQ)	4	CHEM 2312	1				
PHYS 1175 or 1155 (ND)	3	ENCP 2000	1				
PHYS 1176 or 1156 (AD)	1	MATH 2341	4				
PHYS 1177 or 1157	1						
	19		19		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOE 2350	4	BIOE 3310	4	Co-op	0
		BIOE 3380	4	BIOL 3611	4		
		CHEM 2313	4	BIOL 3612 (WI)	1		
		CHEM 2314	1				
		ENGW 3302, 3307, or 3315 (WD)	4				
	0		17		9		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOE 3210	4	BIOE 4790 (EI, CE, WI)	4	Co-op	0

BIOE 5410, 5420, or 5430	4	General elective	4
ENCP 3000	1		
Advanced BIOL or CHEM elective	4		
General elective	4		
<b>Total</b>	<b>0</b>	<b>17</b>	<b>8</b>

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	BIOE 4792 (EI, CE, WI)	4
		BIOE 5420, 5410, or 5430	4
		BIOE 5430, 5410, or 5420	4
		Advanced BIOL or CHEM elective	4
<b>Total</b>	<b>0</b>	<b>16</b>	<b>0</b>

Total Hours: 139

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation		Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4				
GE 1000	1	PHYS 1171 or 1151 (ND)	3				
GE 1501	4	PHYS 1172 or 1152 (AD)	1				
ENGW 1111 (WF)	4	PHYS 1173 or 1153	1				
MATH 1341 (FQ)	4	General elective	4				
<b>Total</b>	<b>17</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2365 (AD, WI)	4	Co-op		Co-op		Vacation	
BIOE 2366	1						
BIOL 1115 or 1111 (ND)	4						
BIOL 1116 or 1112	1						
ENCP 2000	1						
MATH 2321 (FQ)	4						
PHYS 1175 or 1155 (ND)	3						

PHYS 1176 or 1156 (AD)	1				
PHYS 1177 or 1157	1				
<b>Total</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2350	4	Co-op		Co-op		BIOE 3310	4
BIOE 2355	4					CHEM 2313	4
CHEM 2311	4					CHEM 2314	1
CHEM 2312	1						
MATH 2341	4						
<b>Total</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 3210	4	Co-op		Co-op		BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4					General elective	4
BIOL 2301 (ND)	4						
BIOL 2302 (AD)	1						
ENGW 3302, 3307, or 3315 (WD)	4						
<b>Total</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>

**Year 5**

Fall	Hours	Spring	Hours
BIOE 4792 (EI, CE, WI)	4	BIOE 5420, 5410, or 5430	4
BIOE 5410, 5420, or 5430	4	BIOE 5430, 5410, or 5420	4
BIOL 3611	4	Advanced BIOL elective	4
BIOL 3612 (WI)	1	Advanced CHEM elective	4
ENCP 3000	1		
General elective	4		
<b>Total</b>	<b>18</b>	<b>16</b>	<b>0</b>

Total Hours: 139

## Chemical Engineering

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

**Rebecca Kuntz Willits, PhD**  
Professor and Chair

201 Cullinane  
617.373.2989  
617.373.2209 (fax)

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 problem-based 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.

### 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 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 (BSCE)

- Chemical Engineering (p. 428)
- Chemical Engineering and Physics (p. 435)
- Chemical Engineering and Biochemistry (p. 432)

### Minor

- Biochemical Engineering (p. 437)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Chemical Engineering, BSCE

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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315 (Chem Eng Lab 1)	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315 (Chem Eng Lab 2)	4

CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

**Advanced Engineering Elective**

Complete one course numbered between 4000 and 5999 in any of the following subject areas:

BIOE, CHME, CIVE, EECE, ME, IE, MEIE, and ENGR

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement:

GE 1501 Cornerstone of Engineering 1

3 semester hours from the following course count toward the engineering requirement:

GE 1502 Cornerstone of Engineering 2

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
Complete one of the following:		4-5
BIOL 1111	General Biology 1	
BIOL 1115	General Biology 1 for Engineers	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501 Cornerstone of Engineering 1

**Supporting Courses: Advanced Science**

Code	Title	Hours
Complete one of the following:		5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	
CHEM 2315 and CHEM 2316	Organic Chemistry 1 for Chemistry Majors and Lab for CHEM 2315	
Complete one of the following:		5

CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	
CHEM 2317 and CHEM 2318	Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317	

Complete one of the following: 4-6

BIOL 2301	Genetics and Molecular Biology	
BIOL 2327	Human Parasitology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3603	Mammalian Systems Physiology	
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	
CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	
CHEM 3501 and CHEM 3502 and CHEM 3503	Inorganic Chemistry and Lab for CHEM 3501 and Recitation for CHEM 3501	
CHEM 4621 and CHEM 4622	Introduction to Chemical Biology and Lab for CHEM 4621	
CHEM 4628 and CHEM 4629	Introduction to Spectroscopy of Organic Compounds and Identification of Organic Compounds	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 3460	Conservation Biology	
EEMB 3470 and EEMB 3471	Coastal Ecology and Sustainability and Lab for EEMB 3470	
PHYS 1211	Computational Problem Solving in Physics	
PHYS 2303	Modern Physics	
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	
PHYS 3601	Classical Dynamics	
PHYS 3602	Electricity and Magnetism 1	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement:

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 Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 24 SH of academic, nonremedial, nonrepetitive courses.		24

**Major GPA Requirement**

2.000 minimum required in CHME courses

**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		
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0		
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	General Elective	4				
CHEM 1153	0	PHYS 1151 (ND)	3						
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1						
GE 1000	1	PHYS 1153	1						
GE 1501	4	General Elective	4						
MATH 1342 (FQ)	4								
		21			17			8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311	4	BIOL 1115 or PHYS 1155 and PHYS 1156 and PHYS 1157 (ND)	4-5	Advanced Science Elective	4	Co-op	0
CHEM 2312	1	CHEM 2313	4	General Elective	4		
CHME 2310	4	CHEM 2314	1				
CHME 2320	4	CHME 3312	4				
MATH 2341	4	CHME 3322	4				

		ENCP 2000	1				
		17	18-19	8			0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	CHME 3315	4	General Elective	4	Co-op	0
ENGW 3302 or 3315 (to be taken online) (WD)	4	CHME 3316	0	General Elective	4		
		CHME 4510	4				
		CHME 4701	4				
		General Elective	4				
		4	16	8			0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op	0	CHME 4315 (AD, WI)	4				
		CHME 4316	0				
		CHME 4512	4				
		CHME 4703 (EI, CE, WI)	4				
		CHME 4705	0				
		ENCP 3000	1				
		Advanced Engineering Elective	4				
		0	17				

Total Hours: 134-135

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

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0		
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	General Elective	4				
CHEM 1153	0	PHYS 1151 (ND)	3						
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1						
GE 1000	1	PHYS 1153	1						
GE 1501	4	General Elective	4						
MATH 1342 (FQ)	4								
		21			17			8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 or PHYS 1155 <i>and</i> PHYS 1156 <i>and</i> PHYS 1157 (ND)	4-5	Co-op	0	Co-op	0	CHEM 2313	4
CHEM 2311	4	ENGW 3302 or 3315 (to be taken online) (WD)	4			CHEM 2314	1
CHEM 2312	1					CHME 2320	4
CHME 2310	4						
ENCP 2000	1						
MATH 2341	4						
	18-19		4		0		9

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	Co-op	0	Co-op	0	General Elective	4
CHME 3315 (AD)	4					General Elective	4
CHME 3316	0						
CHME 3322	4						
General Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
CHME 4315 (AD, WI)	4	CHME 4512	4
CHME 4316	0	CHME 4703 (EI, CE, WI)	4
CHME 4510	4	CHME 4705	0
CHME 4701	4	Advanced Engineering Elective	4
ENCP 3000	1	General Elective	4
Advanced Science Elective	4		
	17		16

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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				

GE 1501	4	PHYS 1153	1		
MATH 1341 (FQ)	4	General Elective	4		
	17		17	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 or PHYS 1155 <i>and</i> PHYS 1156 <i>and</i> PHYS 1157 (ND)	4-5	CHEM 2313	4	Vacation	0	Co-op	0
CHEM 2311	4	CHEM 2314	1				
CHEM 2312	1	CHME 2310	4				
CHME 2308	4	CHME 2320	4				
MATH 2321 (FQ)	4	ENCP 2000	1				
		MATH 2341	4				
	17-18		18		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 3312	4	General Elective	4	Co-op	0
		CHME 3315 (AD)	4	General Elective	4		
		CHME 3316	0				
		CHME 3322	4				
		ENGW 3302 or 3315 (WD)	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 4315 (AD, WI)	4	General Elective	4	Co-op	0
		CHME 4316	0	General Elective	4		
		CHME 4510	4				
		CHME 4701	4				
		ENCP 3000	1				
		General Elective	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CHME 4512	4
		CHME 4703 (EI, CE, WI)	4
		CHME 4705	0
		Advanced Engineering Elective	4



Advance Science Elective	4
0	16

Total Hours: 134-135

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 or PHYS 1155 <i>and</i> PHYS 1156 <i>and</i> PHYS 1157 (ND)	4-5	Co-op	0	Co-op	0	CHEM 2313	4
CHEM 2311	4					CHEM 2314	1
CHEM 2312	1					CHME 2320	4
CHME 2308	4						
ENCP 2000	1						
MATH 2321 (FQ)	4						
	18-19		0		0		9

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 2310	4	Co-op	0	Co-op	0	General Elective	4
CHME 3322	4					General Elective	4
MATH 2341	4						
General Elective	4						
	16		0		0		8

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	Co-op	0	Co-op	0	Vacation	0
CHME 3315 (AD)	4						
CHME 3316	0						
ENCP 3000	1						
ENGW 3302 or 3315 (WD)	4						

General Elective	4			
	17	0	0	0

#### Year 5

Fall	Hours	Spring	Hours
CHME 4315 (AD, WI)	4	CHME 4512	4
CHME 4316	0	CHME 4703 (EI, CE, WI)	4
CHME 4510	4	CHME 4705	0
CHME 4701	4	Advanced Engineering Elective	4
Advanced Science Elective	4	General Elective	4
	16		16

Total Hours: 134-135

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4

CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4

**Chemical Engineering Capstone**

CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement:

GE 1501	Cornerstone of Engineering 1	2
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3 semester hours from the following course count toward the engineering requirement:

GE 1502	Cornerstone of Engineering 2	3
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**Mathematics/Science Requirement**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
BIOL 4707	Cell and Molecular Biology	4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

**Advanced Biology Elective**

Complete one course in the following range:

BIOL 2311 to BIOL 5999	4
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501	Cornerstone of Engineering 1	1
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**Advanced Science Requirement**

Code	Title	Hours
BIOL 1115	General Biology 1 for Engineers	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5

CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322 or CHEM 2331 and CHEM 2332	Analytical Chemistry and Lab for CHEM 2321 Bioanalytical Chemistry and Lab for CHEM 2331	5

**Advanced Chemistry Elective**

Complete one course in the following range:

CHEM 2310 to CHEM 5999	4
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**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:

GE 1501	Cornerstone of Engineering 1	1
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1 semester hour from the following course counts toward the professional development requirement:

GE 1502	Cornerstone of Engineering 2	1
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**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 16SH of academic, nonremedial, nonrepetitive courses.		16

Major GPA Requirement

2.000 minimum required in CHME courses

**Program Requirement**

145 total semester hours required

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	MATH 2321 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				

GE 1000	1	PHYS 1152 (AD)	1
GE 1501	4	PHYS 1153	1
MATH 1341 (FQ)	4	General Elective	4
	17		17

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 (ND)	4	CHEM 2313	4	BIOL 2301 (ND)	4	Vacation	0
CHEM 2311	4	CHEM 2314	1	BIOL 2302 (AD)	1		
CHEM 2312	1	CHEM 2321 (AD, WI)	4	General Elective	4		
CHME 2310	4	CHEM 2322	1				
MATH 2341	4	CHME 2320	4				
		ENCP 2000	1				
		General Elective	4				
	17		19		9		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	CHME 4315 (AD, WI)	4	BIOL 3611	4	Co-op	0
CHME 3315 (AD)	4	CHME 4316	0	BIOL 3612 (WI)	1		
CHME 3316	0	CHME 4510	4	General Elective	4		
CHME 3322	4	CHME 4701	4				
ENGW 3302, 3307, or 3315 (WD)	4	Advanced Chemistry Elective	4				
	16		16		9		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	BIOL 4707	4
		CHME 4512	4
		CHME 4703 (EI, CE, WI)	4
		CHME 4705	0
		ENCP 3000	1
		Advanced Biology Elective	4
	0		17

Total Hours: 145

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	MATH 2321 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				

GE 1000	1	PHYS 1152 (AD)	1
GE 1501	4	PHYS 1153	1
MATH 1341 (FQ)	4	General Elective	4
	17		17

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 (ND)	4	CHEM 2313	4	BIOL 2301 (ND)	4	Co-op	0
CHEM 2311	4	CHEM 2314	1	BIOL 2302 (AD)	1		
CHEM 2312	1	CHEM 2321 (AD, WI)	4	General Elective	4		
CHME 2310	4	CHEM 2322	1				
MATH 2341	4	CHME 2320	4				
		ENCP 2000	1				
		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 (AD)	4	BIOL 3612 (WI)	1		
		CHME 3316	0	General Elective	4		
		CHME 3322	4				
		ENGW 3302, 3307, or 3315 (WD)	4				
	0		16		9		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOL 4707	4	Vacation	4	Co-op	0
		CHME 4315 (AD, WI)	4				
		CHME 4316	0				
		CHME 4510	4				
		CHME 4701	4				
		ENCP 3000	1				
	0		17		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CHME 4512	4
		CHME 4703 (EI, WI, CE)	4
		CHME 4705	0
		Advanced Biology Elective	4

Advanced  
Chemistry  
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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
PHYS 3600	Advanced Physics Laboratory	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

### Advanced Engineering Elective

Complete one course numbered between 4000 and 5999 in any of the following subject areas:

CHME, CIVE, EECE, ME, IE, MEIE, and ENGR

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:

GE 1501 Cornerstone of Engineering 1

3 semester hours from the following course count toward the engineering requirement:

GE 1502 Cornerstone of Engineering 2

### Mathematics/Science Requirement

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 5318	Principles of Experimental Physics	4

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501 Cornerstone of Engineering 1

### Advanced Science Requirement

Code	Title	Hours
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
PHYS 2303	Modern Physics	4
PHYS 4115	Quantum Mechanics I	4
Complete one of the following:		5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	
CHEM 2317 and CHEM 2318	Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2	

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8 SH of academic, nonremedial, nonrepetitive courses.		8

**Major GPA Requirement**

2.000 minimum required in CHME courses

**Program Requirement**

139 total semester hours required

**Plan of Study****Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CHME 2308	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4	PHYS 1155 (ND)	3		
ENGW 1111 (WF)	4	MATH 1342 (FQ)	4	PHYS 1156 (AD)	1		
GE 1000	1	PHYS 1151 (ND)	3	PHYS 1157	1		
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		9		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311	4	CHEM 2313	4	General Elective (to be taken online)	4	Vacation	0
CHEM 2312	1	CHEM 2314	1				
CHME 2320	4	CHME 2310	4				
MATH 2341	4	CHME 3322	4				
PHYS 2371 (ND)	3	PHYS 2303 (ND)	4				
PHYS 2372 (EI)	1						
	17		17		4		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	CHME 4315 (AD, WI)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
CHME 3315 (AD)	4	CHME 4316	0	General Elective	4		
CHME 3316	0	CHME 4510	4				
ENGW 3302 or 3315 (WD)	4	CHME 4701	4				
Advanced Engineering Elective	4	ENCP 2000	1				
		PHYS 3601 (ND)	4				
	16		17		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	CHME 4703 (EI, CE, WI)	4
		CHME 4705	0
		ENCP 3000	1
		PHYS 3602 (ND)	4
		PHYS 4115 (ND, FQ)	4
		PHYS 5318 (ND, AD, WI, CE)	4
	0		17

Total Hours: 139

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CHME 2308	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4	PHYS 1155 (ND)	3		
ENGW 1111 (WF)	4	MATH 1342 (FQ)	4	PHYS 1156 (AD)	1		
GE 1000	1	PHYS 1151 (ND)	3	PHYS 1157	1		

GE 1501	4	PHYS 1152 (AD)	1			
MATH 1341 (FQ)	4	PHYS 1153	1			
	17		17		9	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311	4	CHEM 2313	4	General Elective (to be taken online)	4	Co-op	0
CHEM 2312	1	CHEM 2314	1				
CHME 2320	4	CHME 2310	4				
MATH 2341	4	CHME 3322	4				
PHYS 2371 (ND)	3	ENCP 2000	1				
PHYS 2372 (EI)	1	PHYS 2303 (ND)	4				
	17		18		4		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 3312	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
		CHME 3315 (AD)	4	General Elective	4		
		CHME 3316	0				
		ENGW 3302 or 3315 (WD)	4				
		PHYS 3601 (ND)	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 4315	4	Vacation	0	Co-op	0
		CHME 4316	0				
		CHME 4510	4				
		CHME 4701	4				
		ENCP 3000	1				
		PHYS 3602 (ND)	4				
	0		17		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CHME 4703 (EI, CE, WI)	4
		CHME 4705	0
		PHYS 4115 (ND, FQ)	4
		PHYS 5318 (ND, AD, WI, CE)	4

Advanced Engineering Elective

4

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 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 Engineering	4
CHME 2310	Transport Processes 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 5630	Biochemical Engineering	4

### Capstone

Code	Title	Hours
CHME 4703	Capstone Design 2: Chemical Process Design	4

### Supporting Courses: Math and Science

Code	Title	Hours
MATH 1241	Calculus 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
MATH 1242	Calculus 2	4
or MATH 1342	Calculus 2 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
BIOL 2301	Genetics and Molecular Biology	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
Complete one of the following:		5
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	



**GPA Requirement**

2.000 GPA required in the minor

**Civil and Environmental Engineering**

Website (<http://www.civ.neu.edu>)

**Jerome F. Hajjar, PhD, PE**

CDM Smith Professor and Chair

400 Snell Engineering Center

617.373.2444

617.373.4419 (fax)

**Overview**

As a leader in research and education, the Department of Civil and Environmental Engineering at Northeastern University prepares undergraduate engineers to excel in their chosen careers, including engineering practice, academia, infrastructure management, land-use planning and development, urban and regional planning, public sector leadership, and many others.

Our students have an opportunity to obtain a broad knowledge base in science, engineering, and general studies that allows them flexibility in career development and graduate education. At the same time, our graduates should be responsible and scientifically educated citizens, prepared to contribute personally as well as professionally to an educated, democratic society. Our academic programs provide future professionals with the core skills necessary to practice civil and environmental engineering and to work with other engineers in an interdisciplinary environment.

Experience tells us that civil and environmental engineering graduates will enter almost every field imaginable. The knowledge and skills acquired—understanding science, critical thinking, effective communication, and understanding the social context, among them—form an excellent foundation for a host of careers, as well as for a fulfilling life outside the world of work.

**Mission of the Department**

Advancing innovative civil and environmental solutions for society and creating globally oriented engineering leaders by integrating experiential education and use-inspired interdisciplinary research.

**Academic Programs**

With a strategic focus in urban engineering, and through a range of teaching and research strengths, anchored by several multidisciplinary, multi-institutional centers and programs, our academic programs are designed to prepare future engineers to address the global, complex, and ever-evolving engineering challenges of our time by building on current department strengths and expanding into vital areas.

Three overarching themes are emphasized in our programs: environmental health, civil infrastructure security, and sustainable resource engineering. These themes are aligned with the department's premier strengths in simulation (both computational and experimental), smart sensing, data and network science, and urban informatics and are incorporated in the undergraduate programs we offer.

Successful graduates in civil engineering and environmental engineering will have the ability to create, invent, and lead a new generation of professionals and will be able to address key challenges to protect the

natural environment and to design and create the built environment for community living, industry, and society development.

Our programs have been designed with a set of electives that permit students to explore or acquire further depth in other fields of interest. Students can use these electives to earn a minor in environmental chemistry, architectural engineering, business, architectural history, music, computer science, or any number of other fields. In the civil engineering field, our programs encompass several disciplines, including transportation planning and engineering; structural engineering; geotechnical engineering; environmental, water resources, and coastal engineering; and construction management. In the environmental engineering field, our programs include developing sustainable resource engineering solutions to environmental health needs with an understanding of institutional and legal frameworks, all related to interconnected challenges in water, energy, air pollution, and waste management, to protect and provide a better quality of life to the human race. For a full list of the department's academic program offerings, please refer to the programs tab.

**Other Programmatic Features**

By participating in our cooperative education program, our graduates will have an opportunity to explore what career objectives fit their own skills and interests. The goal of this component of our program is to offer students valuable professional experience and contacts that will help get them started in their professional career, as well as to develop career management skills. The co-op program parallels the academic program in level of responsibility and sophistication.

The department also offers significant research opportunities throughout all fields of civil and environmental engineering, including participating in research centers based in our department and college, as well as new interdisciplinary graduate and professional master's programs.

**Programs****Bachelor of Science in Civil Engineering (BSCE)**

- Civil Engineering (p. 438)
- Civil Engineering and Architectural Studies (p. 64)

**Bachelor of Science in Environmental Engineering (BSEnVE)**

- Environmental Engineering (p. 447)
- Environmental Engineering and Health Science (p. 450)
- Environmental Engineering and Landscape Architecture (p. 68)

**Minor**

- Architectural Engineering (p. 456)
- Civil Engineering (p. 457)
- Environmental Chemistry (p. 458)

**Accelerated Programs**

See Accelerated Bachelor/Graduate Degree Programs (p. )

**Civil Engineering, BSCE**

Civil engineers play a vital role in human progress and well-being worldwide. Conceptualizing, innovating, designing, and building sustainable infrastructure and environments is fundamental in helping society progress. Modern challenges, including engineering a resilient and sustainable urban infrastructure; establishing clean water and a clean environment; and advancing technologies in computing, sensing, and human health, are all part of the development of society.

Civil engineers design and construct buildings, bridges, tunnels, dams, and river systems. They also plan, design, construct, and manage highways, railroads, canals, and airports; regulate rivers and control floods; and design and build systems for water distribution and environmental protection.

With a broad range of applications, our civil engineering students have the opportunity to explore a range of disciplinary and interdisciplinary tracks, including environmental and water systems, structural engineering, transportation engineering, geotechnical and geoenvironmental engineering, construction management, civil infrastructure security, environmental health, and sustainable resource engineering.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Interpreting Culture (IC) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4
CIVE 2324 or CIVE 3425	Concrete Structure Design Steel Structure Design	4
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Civil Engineering Project Elective</b>		
Complete one of the following:		4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	
<b>Senior Design Project</b>		

Complete one of the following: 5

CIVE 4765	Senior Design Project—Environmental
CIVE 4767	Senior Design Project—Structural
CIVE 4768	Senior Design Project—Transportation

### Civil Engineering Technical Electives

Complete three of the following: 11-12

CIVE 2324	Concrete Structure Design
CIVE 3425	Steel Structure Design
CIVE 3435	Environmental Pollution Fate and Transport
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad
CIVE 4542	Foundation Engineering and Design
CIVE 4554	Highway Design
CIVE 4566	Design for Sustainable Transportation: Netherlands
CIVE 4567	Planning and Policy for Sustainable Urban Transportation: Netherlands
CIVE 4575	Construction Management
CIVE 4777	Climate Hazards and Resilient Cities Abroad
CIVE 4778	Climate Adaptation and Policy Abroad
CIVE 4780	Timber and Masonry Structures: Technology and Design Abroad
CIVE 4781	Introduction to Preservation and Restoration of Historic Buildings, Technology, and Policies Abroad
CIVE 5221	Construction Project Control and Organization
CIVE 5231	Alternative Project Delivery Systems in Construction
CIVE 5260	Environmental Fluid Mechanics
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking
CIVE 5271	Solid and Hazardous Waste Management
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure
CIVE 5280	Remote Sensing of the Environment
CIVE 5281	Coastal Dynamics and Design
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300
CIVE 5363	Climate Science, Engineering Adaptation, and Policy
CIVE 5373	Transportation Systems: Analysis and Planning
CIVE 5376	Traffic Engineering and Sustainable Urban Street Design
CIVE 5520	Structural Systems
CIVE 5522	Structural Systems Modeling
CIVE 5525	Prestressed Concrete Design
CIVE 5536	Hydrologic and Hydraulic Design
CIVE 5699	Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)
SBSY 5100	Sustainable Design and Technologies in Construction

SBSY 5200	Sustainable Engineering Systems for Buildings
SBSY 5250	Building Performance Simulation
SBSY 5300	Information Systems for Integrated Project Delivery

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

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

1 semester hour from the following course counts toward the engineering requirement: 1

CIVE 3464 Probability and Engineering Economy for Civil Engineering

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
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**Required Mathematics/Science**

Complete one of the following: 4

CHEM 1151 General Chemistry for Engineers and CHEM 1153 and Recitation for CHEM 1151

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

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 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

**Science Elective**

Complete one of the following: 4-5

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

BIOL 1141 Microbes and Society

BIOL 1143 Biology and Society

CHEM 2311 Organic Chemistry 1 and CHEM 2312 and Lab for CHEM 2311 and CHEM 2319 and Recitation for CHEM 2311

CHEM 3410 Environmental Geochemistry

EEMB 1101 Foundations in Ecology and and EEMB 1102 Evolutionary Biology and Lab for EEMB 1101

EEMB 1450 Introduction to Marine Biology

EEMB 2302 Ecology and EEMB 2303 and Lab for EEMB 2302

ENVR 1120 Oceans and Coasts

ENVR 1200 Dynamic Earth

ENVR 2200 Earth's Changing Cycles

ENVR 3125 Global Oceanic Change

ENVR 3200 Water Resources

ENVR 3600 Oceanography

ENVR 5201 Geologic Field Seminar

ENVR 5350 Sustainable Energy and Climate Solutions

PHYS 1111 Astronomy

PHYS 1125 Introduction to Network Science: From the Human Cell to Facebook

PHYS 1155 Physics for Engineering 2 and PHYS 1156 and Lab for PHYS 1155

PHYS 4623 Medical Physics

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464 Probability and Engineering Economy for Civil Engineering

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

**Supporting Course**

Code	Title	Hours
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**Economics**

ECON 1115 Principles of Macroeconomics 4  
or ECON 1116 Principles of Microeconomics

**Professional Development**

Code	Title	Hours
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**Professional Development**

GE 1000 Introduction to the Study of Engineering 1

ENCP 2000 Introduction to Engineering Co-op Education 1

ENCP 3000 Professional Issues in Engineering 1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2

**Writing Requirements**

Code	Title	Hours
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**Writing**

A grade of C or higher is required:

ENGW 1111 First-Year Writing 4

ENGW 3302	Advanced Writing in the Technical Professions	4
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### Required General Electives

Code	Title	Hours
	Complete 24SH of academic, nonremedial, nonrepetitive courses.	24

### Major GPA Requirement

2.000 minimum required in major (CIVE) courses

### Program Requirement

134 total semester hours required

### Plan of Study

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

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	CIVE 2221	4	Vacation	0		
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	CIVE 2222	0				
CHEM 1153	0	PHYS 1151 (ND)	3	General Elective	4				
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1						
GE 1000	1	PHYS 1153	1						
GE 1501	4	General Elective	4						
MATH 1342 (FQ)	4								
		21			17			8	0

Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
CIVE 2260	4	CIVE 2320	4	CIVE 2324	4	Co-op	0		
CIVE 2261 (AD)	1	CIVE 2321	0	General Elective	4				
CIVE 2334	4	CIVE 2331 or 2340 <i>and</i> 2341	4						
ECON 1115 or 1116 (SI, AD)	4	ENCP 2000	1						
MATH 2341	4	GE 3300	4						
		General Elective	4						
		17			17			8	0

Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op	0	CIVE 2331 or 2340 <i>and</i> 2341	5	General Elective	4	Co-op	0		
ENGW 3302 (to be taken online) (WD)	4	CIVE 3464	4	General Elective	4				
		Civil Project Elective (WI)	4						
		Civil Tech. Elective	3						
		4			16			8	0

Year 4									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op	0	CIVE 4765, 4767, or 4768 (EI, CE, WI)	5						
		ENCP 3000	1						
		Civil Tech. Elective	4						
		Civil Tech. Elective	4						
		Science Elective	4						
		0			18				

Total Hours: 134

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

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	CIVE 2221	4	Vacation	0		
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	CIVE 2222	0				
CHEM 1153	0	PHYS 1151 (ND)	3	General Elective	4				
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1						
GE 1000	1	PHYS 1153	1						
GE 1501	4	General Elective	4						
MATH 1342 (FQ)	4								
		21			17			8	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2260	4	Co-op	4	Co-op	4	General Elective	4

CIVE 2261 (AD)	1	General Elective	4
CIVE 2320	4		
CIVE 2321	0		
CIVE 2334	4		
ENCP 2000	1		
MATH 2341	4		
	18	0	0
			8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2324	4	Co-op		Co-op		CIVE 2340	4
CIVE 2331	4	ENGW 3302 (to be taken online) (WD)	4			CIVE 2341	1
ECON 1115 or 1116 (SI, AD)	4					General Elective	3
GE 3300	4						
	16		4		0		8

**Year 4**

Fall	Hours	Spring	Hours
ENCP 3000	1	CIVE 4765, 4767, or 4768	5
CIVE 3464	4	Civil Tech. Elective	4
Civil Project Elective (WI)	4	Civil Tech. Elective	4
Civil Tech. Elective	4	General Elective	4
Science Elective	4		
	17		17

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17	0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2260	4	Vacation	0	Co-op	0
CIVE 2222	0	CIVE 2261 (AD)	1				
CIVE 2334	4	CIVE 2320	4				

ECON 1115 or 1116 (AD, SI)	4	CIVE 2321	0
MATH 2321 (FQ)	4	ENCP 2000	1
		GE 3300	4
		MATH 2341	4
	16		18
			0
			0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CIVE 2331	4	CIVE 2324	4	Co-op	0
		CIVE 2340	4	General Elective	4		
		CIVE 2341	1				
		Civil Tech. Elective	4				
		Science Elective	4				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CIVE 3464	4	General Elective	4	Co-op	0
		ENCP 3000	1	General Elective	4		
		ENGW 3302 (WD)	4				
		Civil Project Elective (WI)	4				
		Civil Tech. Elective	3				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CIVE 4765, 4767, or 4768 (EI, CE, WI)	5
		Civil Tech. Elective	4
		General Elective	4
		General Elective	4
	0		17

Total Hours: 134

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				

**Civil Engineering and Architectural Studies, BSCE**

Civil engineering and architecture are two important disciplines that deal with the process of creating the built environment to satisfy societal needs. Both professions have critical functions that are essential in the development of society in terms of planning cities and designing more resilient infrastructure and rely on one another to accomplish it. The combination of these two professions creates great synergy as architects focus more on the functional and human aspects of development, while civil engineers concentrate on the structural elements of the design, ensuring durable structures that perform under normal and extreme loads.

Students successfully completing the program receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of architectural topics and design experiences.

Students also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

**Engineering Requirement**

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	4
CIVE 2324 or CIVE 3425	Concrete Structure Design Steel Structure Design	4
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	5
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

**Civil Engineering Project Elective**

Complete one of the following: 4

GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CIVE 2221	4	Co-op	0	Co-op	0	Vacation	0
CIVE 2222	0						
CIVE 2260	4						
CIVE 2261 (AD)	1						
CIVE 2334	4						
ENCP 2000	1						
MATH 2321 (FQ)	4						
	18		0		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CIVE 2320	4	Co-op	0	Co-op	0	CIVE 2340	4
CIVE 2321	0					CIVE 2341	1
CIVE 2331	4					MATH 2341	4
ECON 1115 or 1116 (AD, SI)	4						
GE 3300	4						
	16		0		0		9
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CIVE 2324	4	Co-op	0	Co-op	0	General Elective	4
ENCP 3000	1					General Elective	4
ENGW 3302 (WD)	4						
Civil Tech. Elective	3						
Science Elective	4						
	16		0		0		8
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
CIVE 3464	4	CIVE 4765, 4767, or 4768 (EI, CE, WI)	5				
Civil Project Elective (WI)	4	Civil Tech. Elective	4				
Civil Tech. Elective	4	General Elective	4				
General Elective	4	General Elective	4				
	16		17				

Total Hours: 134



CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 5536	Hydrologic and Hydraulic Design	
<b>Senior Design Project</b>		
CIVE 4767	Senior Design Project—Structural	5
<b>Civil Engineering Technical Electives</b>		
Complete two of the following:		7-8
CIVE 2324	Concrete Structure Design	
CIVE 3425	Steel Structure Design	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4567	Planning and Policy for Sustainable Urban Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4778	Climate Adaptation and Policy Abroad	
CIVE 4780	Timber and Masonry Structures: Technology and Design Abroad	
CIVE 4781	Introduction to Preservation and Restoration of Historic Buildings, Technology, and Policies Abroad	
CIVE 5221	Construction Project Control and Organization	
CIVE 5231	Alternative Project Delivery Systems in Construction	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5373	Transportation Systems: Analysis and Planning	
CIVE 5376	Traffic Engineering and Sustainable Urban Street Design	
CIVE 5520	Structural Systems	
CIVE 5522	Structural Systems Modeling	
CIVE 5525	Prestressed Concrete Design	
CIVE 5536	Hydrologic and Hydraulic Design	

CIVE 5699	Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)	
SBSY 5100	Sustainable Design and Technologies in Construction	
SBSY 5200	Sustainable Engineering Systems for Buildings	
SBSY 5250	Building Performance Simulation	
SBSY 5300	Information Systems for Integrated Project Delivery	

**Supplemental Credit**

1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
Complete one of the following:		4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
<b>Science Elective</b>		
Complete one of the following:		4-5
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 1141	Microbes and Society	
BIOL 1143	Biology and Society	

CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	
CHEM 3410	Environmental Geochemistry	
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	
EEMB 1450	Introduction to Marine Biology	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	
ENVR 5350	Sustainable Energy and Climate Solutions	
PHYS 1111	Astronomy	
PHYS 1125	Introduction to Network Science: From the Human Cell to Facebook	
PHYS 1155 and PHYS 1156	Physics for Engineering 2 and Lab for PHYS 1155	
PHYS 4623	Medical Physics	

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464	Probability and Engineering Economy for Civil Engineering	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	
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**Professional Development**

Code	Title	Hours
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**Professional Development**

GE 1000	Introduction to the Study of Engineering	1
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ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	
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**Architecture Requirements**

Code	Title	Hours
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ARCH 1110	Fundamental Architectural Representation	4
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ARCH 1120	Fundamental Architectural Design	6
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ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
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ARCH 2130	Site, Space, and Program	6
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ARCH 2140	Urban Institutions	6
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ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	4
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ARCH 3210 and ARCH 3211	Environmental Systems and Recitation for ARCH 3210	4
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**Architectural Electives**

Complete two of the following: 8

ARCH 3370	Advanced Topics in Architectural History	
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ARCH 3351	Architecture Topics Abroad: Theory	
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ARCH 3352	Architecture Topics Abroad: Drawing	
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ARCH 3450	Advanced Architectural Communication	
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ARCH 4850	Urban and Architectural History Abroad	
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ARCH 5115	Option Studio	
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ARCH 5220	Integrated Building Systems	
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ARCH 5310	Design Tactics and Operations	
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**Writing Requirements**

Code	Title	Hours
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**Writing**

A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
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ENGW 3302	Advanced Writing in the Technical Professions	4
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**Integrative Courses**

Code	Title	Hours
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CIVE 4767	Senior Design Project—Structural	
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**ENGINEERING GPA REQUIREMENT**

Minimum 2.000 GPA required in all Engineering courses

**ARCHITECTURE GPA REQUIREMENT**

Minimum 2.000 GPA required in all Architecture courses

**Program Requirements**

144 total semester hours required

Note:

- Students who wish to be considered for the two-year Master of Architecture Program at Northeastern **SHOULD** take ARCH 3450 as an elective and **SHOULD NOT** take ARCH 5115 or ARCH 5220 as architectural electives.
- Students who wish to be considered for the two-year Master of Architecture Program at Northeastern **MUST** have satisfied the Structural Systems (ARCH 5230) requirement. This requirement is achieved in this combined major by taking the following three courses, as follows:
  - CIVE 2221 Statics and Solid Mechanics (including recitation CIVE 2222)
  - CIVE 2320 Structural Analysis (including recitation CIVE 2321)
  - And at least one design course from the following:
    - CIVE 2324 Concrete Structure Design
    - CIVE 3425 Steel Structure Design

**Plan of Study****Four Years, 1 Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	ARCH 1120 (ND, EI)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						
	17		18		9		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1310 (IC, DD)	4	ARCH 2340 (IC, SI, WI)	4	CIVE 2324	4	Co-op	
ARCH 1311	0	ARCH 2341	0	GE 3300	4		
ARCH 2130	6	CIVE 2260	4				
CIVE 2221	4	CIVE 2261 (AD)	1				
CIVE 2222	0	CIVE 2320	4				
MATH 2341	4	CIVE 2321	0				
		CIVE 2334	4				
		ENCP 2000	1				
	18		18		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ARCH 2140	6	ENGW 3302 (WD)	4	Vacation	
		CIVE 2331	4				
		CIVE 2340	4				
		CIVE 2341	1				
		Civil Tech. Elective	4				
	0		19		4		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 3464	4	ARCH 3210 (ND, AD)	4				
ENCP 3000	1	ARCH 3211	0				
Architectural Elective	4	CIVE 4767 (EI, WI, CE)	5				
Civil Project Elective (WI)	4	Architectural Elective	4				
Civil Tech. Elective	4	Science Elective	4				
	17		17				

Total Hours: 145

**Five Years, 3 Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	ARCH 1120 (ND, EI)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						
	17		18		9		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARCH 1310 (IC, DD)	4	CIVE 2260	4	Vacation		Co-op	
ARCH 1311	0	CIVE 2261 (AD)	1				
ARCH 2130	6	CIVE 2320	4				
CIVE 2221	4	CIVE 2321	0				
CIVE 2222	0	CIVE 2334	4				
MATH 2341	4	ENCP 2000	1				
		GE 3300	4				
	18		18		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ARCH 2340 (IC, SI, WI)	4	CIVE 2324	4	Co-op	
		ARCH 2341	0	Science Elective	4		
		CIVE 2331	4				
		CIVE 2340	4				
		CIVE 2341	1				
		Civil Tech. Elective	4				
	0		17		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ARCH 2140	6	Vacation		Co-op	
		ARCH 3210 (ND, AD)	4			ENGW 3302 (to be taken online) (WD)	4
		ARCH 3211	0				
		CIVE 3464	4				
		ENCP 3000	1				
		Civil Project Elective (WI)	4				
	0		19		0		4

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 4767 (EI, WI, CE)	5				

Architectural Elective	4
Architectural Elective	4
Civil Tech. Elective	4
0	17

Total Hours: 145

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4

CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 4765	Senior Design Project—Environmental	5
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4

### Environmental Engineering Technical Electives

Complete 11-12 semester hours from the following:		11-12
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4778	Climate Adaptation and Policy Abroad	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5536	Hydrologic and Hydraulic Design	

### Supplemental Credit

1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 2335	Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 3430	Engineering Microbiology and Ecology	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

<b>Science Elective (Earth)</b>		
Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	

<b>Supplemental Credit</b>		
3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 2335	Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 3430	Engineering Microbiology and Ecology	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2	

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4

**Required General Electives**

Code	Title	Hours
Complete 24 SH of academic, nonremedial, nonrepetitive courses.		24

**Major GPA Requirement**

2.000 minimum required in major (CIVE) courses

**Program Requirement**

133 total semester hours required

**Plan of Study**

**FOUR YEARS, TWO CO-OPS IN SUMMER 2 / FALL**

<b>Year 1</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1		4 GE 1502 (ER)		4 CIVE 2221		4 Vacation	0
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	CIVE 2222		0	
CHEM 1153	0	PHYS 1151 (ND)	3	General Elective		4	
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1				
GE 1000	1	PHYS 1153	1				
GE 1501	4	General Elective	4				
MATH 1342 (FQ)	4						
		21		17		8	
						0	

<b>Year 2</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2260	4	CIVE 2331	4	General Elective		4 Co-op	0
CIVE 2261 (AD)	1	CIVE 3435	4	General Elective		4	
CIVE 2334	4	ENCP 2000	1				
CIVE 2335	4	GE 3300	4				
MATH 2341	4	Science Elective (Earth)	4				
		17		17		8	
						0	

<b>Year 3</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CIVE 3430	4	General Elective		4 Co-op	0

CIVE 4534 (WI)	3 General Elective	4 ENGW 3302 (to be taken online) (WD)	4
CIVE 4535	1		
Civil Tech. Elective	4		
Civil Tech. Elective	4		
0	16	8	4

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	CIVE 3464	4
		CIVE 4765 (EI, WI, CE)	5
		CIVE 5300	2
		CIVE 5301	2
		ENCP 3000	1
		Civil Tech. Elective	3
0		17	

Total Hours: 133

**FOUR YEARS, TWO CO-OPS IN SUMMER 1 / SPRING**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	CIVE 2221	4	Vacation	
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	CIVE 2222	4		0
CHEM 1153	0	PHYS 1151 (ND)	3	General Elective	4		
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1				
GE 1000	1	PHYS 1153	1				
GE 1501	4	General Elective	4				
MATH 1342 (FQ)	4						
21		17		8			0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2260	4	Co-op		Co-op		General Elective	4
CIVE 2261 (AD)	1					General Elective	4
CIVE 2334	4						
CIVE 2335	4						
ENCP 2000	1						
MATH 2341	4						
18		0		0			8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2331	4	Co-op		Co-op		General Elective	4
CIVE 3435	4	ENGW 3302 (to be taken online) (WD)	4			General Elective	4
GE 3300	4						
Science Elective (Earth)	4						
16		4		0			8

**Year 4**

Fall	Hours	Spring	Hours
CIVE 3430	4	CIVE 3464	4
CIVE 4534 (WI)	3	CIVE 4765 (EI, WI, CE)	5
CIVE 4535	1	CIVE 5300	2
Civil Tech. Elective	4	CIVE 5301	2
Civil Tech. Elective	4	ENCP 3000	1
		Civil Tech. Elective	3
16		17	

Total Hours: 133

**FIVE YEARS, THREE CO-OPS IN SUMMER 2 / FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
ENGW 1111 (WF)	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
17		17		0			0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2331	4	Vacation	4	Co-op	0
CIVE 2222	0	CIVE 2335	4				
CIVE 2260	4	ENCP 2000	1				
CIVE 2261 (AD)	1	GE 3300	4				
CIVE 2334	4	MATH 2341	4				
MATH 2321 (FQ)	4						
17		17		0			0



Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CIVE 3430	4 General Elective	4 Co-op	0
	CIVE 3435	4 General Elective	4	
	Civil Tech. Elective	4		
	Science Elective (Earth)	4		
	0	16	8	0

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
Co-op	0 CIVE 3464	4 General Elective	4 Co-op	0
	CIVE 4534 (WI)	3 General Elective	4	
	CIVE 4535	1		
	ENCP 3000	1		
	ENGW 3302 (WD)	4		
	Civil Tech. Elective	4		
	0	17	8	0

Year 5		
Fall	Hours Spring	Hours
Co-op	0 CIVE 4765 (EI, WI, CE)	5
	CIVE 5300	2
	CIVE 5301	2
	Civil Tech. Elective	3
	General Elective	4
	0	16

Total Hours: 133

**FIVE YEARS, THREE CO-OPS IN SUMMER 1 / SPRING**

Year 1				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CHEM 1151 (ND)	4 GE 1502 (ER)	4 Vacation	Vacation	
CHEM 1153	0 MATH 1342 (FQ)	4		
ENGW 1111 (WF)	4 PHYS 1151 (ND)	3		
GE 1000	1 PHYS 1152 (AD)	1		
GE 1501	4 PHYS 1153	1		
MATH 1341 (FQ)	4 General Elective	4		
	17	17	0	0

Year 2				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2221	4 Co-op	Co-op	Vacation	

CIVE 2222	0			
CIVE 2260	4			
CIVE 2261 (AD)	1			
CIVE 2334	4			
ENCP 2000	1			
MATH 2321 (FQ)	4			
	18	0	0	0

Year 3				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 2331	4 Co-op	Co-op	General Elective	4
CIVE 2335	4		General Elective	4
GE 3300	4			
MATH 2341	4			
	16	0	0	8

Year 4				
Fall	Hours Spring	Hours Summer 1	Hours Summer 2	Hours
CIVE 3430	4 Co-op	Co-op	General Elective	4
CIVE 3435	4		General Elective	4
Civil Tech. Elective	4			
Science Elective (Earth)	4			
	16	0	0	8

Year 5			
Fall	Hours Spring	Hours	Hours
CIVE 3464	4 CIVE 4765 (EI, WI, CE)	5	
CIVE 4534 (WI)	3 CIVE 5300	2	
CIVE 4535	1 CIVE 5301	2	
ENCP 3000	1 Civil Tech. Elective	3	
ENGW 3302 (WD)	4 General Elective	4	
Civil Tech. Elective	4		
	17	16	

Total Hours: 133

**Environmental Engineering and Health Science, BSEnvE**

This intercollege combined major is designed for students who would like to explore their interest in the health sciences while earning the benefit of a Bachelor of Science degree in environmental engineering. The combined major reflects the respective departmental thrusts in environmental health and sustainable resource engineering to create awareness about the complex relationship between the environment and human health, prepare professionals in this growing area capable of providing engineering solutions to current and emerging topics related to environmental engineering

and health sciences, and maintain healthy environmental systems by applying and developing techniques to reduce exposure to health hazards. This program combines the content of two majors to allow students to learn the breadth and depth of the convergence between public health and environmental engineering.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Engineering Requirement**

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 4765	Senior Design Project—Environmental	5
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Environmental Engineering Technical Electives</b>		
Complete three of the following:		11-12
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4778	Climate Adaptation and Policy Abroad	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	

CIVE 5536	Hydrologic and Hydraulic Design	
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 2335	Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 3430	Engineering Microbiology and Ecology	
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.<sup>1</sup>

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

<b>Science Elective (Earth)</b>		
Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	

<b>Supplemental Credit</b>		
3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 2335	Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 3430	Engineering Microbiology and Ecology	

1 semester hour from the following course counts toward the mathematics/science requirement:

GE 1501 Cornerstone of Engineering 1

### Professional Development

Code	Title	Hours
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#### Professional Development

GE 1000	Introduction to the Study of Engineering	1
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ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement:

GE 1502 Cornerstone of Engineering 2

### Health Sciences Major Requirement

Code	Title	Hours
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HLTH 5450	Healthcare Research (Principles of Epidemiology in Medicine and Public Health)	4
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or PHTH 4202 Principles of Epidemiology in Medicine and Public Health

PHTH 1260	The American Healthcare System	4
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or PHTH 1261 Comparative Healthcare Systems

PHTH 2210	Foundations of Biostatistics	4
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PHTH 2350	Community and Public Health	4
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or PHTH 2351 Community and Public Health - Global

PHTH 2414	Environmental Health	4
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PHTH 2515	Healthcare Policy and Administration	4
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PHTH 4120	Global Perspectives on Discrimination and Health	4
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PHTH 4540	Health Education and Program Planning	4
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PHTH 5214	Environmental Health	3
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### Writing Requirements

Code	Title	Hours
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#### Writing

A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
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ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

Integrative Course

Code	Title	Hours
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CIVE 4765	Senior Design Project—Environmental	5
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### Engineering GPA Requirement

A minimum 2.000 GPA is required in major (CIVE) courses

### Health Sciences Major Requirement

A minimum grade of C or higher is required for all HLTH and PHTH courses

### Program Requirement

144 total semester hours required

#### Note:

<sup>1</sup> Mathematics/Science Requirement: CHEM 1151, MATH 1341, and PHYS 1151 require a grade of C- or higher

### Plan of Study

#### FOUR YEARS, 1 CO-OP SUMMER 2/FALL

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	MATH 2321 (FQ)	4	Vacation	4
CHEM 1153	0	MATH 1342 (FQ)	4	PHTH 1260 (SI)	4		
ENGW 1111 (WF)	4	PHTH 2210 (FQ, AD)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		8		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2331	4	MATH 2341	4	Co-op	4
CIVE 2222	0	CIVE 2335	4	PHTH 2350 (SI)	4		
CIVE 2260	4	CIVE 3430	4				
CIVE 2261 (AD)	1	ENCP 2000	1				
CIVE 2334	4	PHTH 2414	4				
PHTH 2515	4						
	17		17		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 3435	4	GE 3300	4	Vacation	4
ENGW 3302 or 3315 (to be taken online) (WD)	4	HLTH 5450 or PHTH 4202 (ND, WI)	4	Science Elective (Earth)	4		
		PHTH 4120 (IC, DD)	4				
		Civil Tech. Elective	4				
	4		16		8		0

#### Year 4

Fall	Hours	Spring	Hours
CIVE 4534 (WI)	3	CIVE 3464	4

CIVE 4535	1	CIVE 4765 (EI, WI, CE)	5
ENCP 3000	1	CIVE 5300	2
PHTH 4540 (WI)	4	CIVE 5301	2
Civil Tech. Elective	4	PHTH 5214	3
Civil Tech. Elective	3		
16		16	

Total Hours: 144

**FIVE YEARS, 3 CO-OPS SUMMER 2/FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4	PHTH 1260 (SI)	4		
ENGW 1111 (WF)	4	PHTH 2210 (FQ, AD)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
17		17		8		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2331	4	MATH 2341	4	Co-op	
CIVE 2222	0	CIVE 2335	4	PHTH 2350 (SI)	4		
CIVE 2260	4	CIVE 3430	4				
CIVE 2261 (AD)	1	ENCP 2000	1				
CIVE 2334	4	PHTH 2414	4				
PHTH 2515	4						
17		17		8		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 3435	4	GE 3300	4	Co-op	
		HLTH 5450 or PHTH 4202 (ND, WI)	4	Science Elective (Earth)	4		
		PHTH 4120	4				
		Civil Tech. Elective	4				
0		16		8		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 3464	4	Vacation	4	Co-op	
ENGW 3302 or 3315 (to be taken online) (WD)	4	CIVE 4534 (WI)	3				

CIVE 4535	1						
ENCP 3000	1						
PHTH 4540 (WI)	4						
Civil Tech. Elective	3						
4		16		0		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		CIVE 5300	2
		CIVE 5301	2
		CIVE 4765 (EI, WI, CE)	5
		PHTH 5214	3
		Civil Tech. Elective	4
0		16	

Total Hours: 144

**Environmental Engineering and Landscape Architecture, BSEnvE**

Environmental engineering and landscape architecture are two important disciplines that deal with the complex interaction between the natural and the built environment. Both professions have critical functions that are essential in the development of society in terms of planning and designing more sustainable cities. The combination of these two professions creates great synergy and seeks to expose engineering students to the conceptual and practical content of landscape planning. Successful graduates from this degree are prepared to imagine and create projects that can be translated into reality providing solutions to address the world's growing challenges by designing clean and sustainable environments and green infrastructure.

Students completing the combined major Bachelor of Science in Environmental Engineering and Landscape Architecture receive a rigorous engineering training education, enabling a high level of engineering knowledge as well as exposure to a broad range of landscape architectural topics and design experiences.

Students will also have the opportunity to undertake a co-op experience consistent with the policies and opportunities offered within the College of Engineering.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

For this combined major, Nupath requirements are satisfied in several courses across the program and by required courses in the combined major.

## Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Senior Design Project</b>		
CIVE 4765	Senior Design Project—Environmental	5
<b>Environmental Engineering Technical Electives</b>		
Complete two of the following:		7-8
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4778	Climate Adaptation and Policy Abroad	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5536	Hydrologic and Hydraulic Design	
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the engineering requirement:		1
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 2335	Environmental Engineering Chemistry	
3 semester hours from the following course count toward the engineering requirement:		3
CIVE 3430	Engineering Microbiology and Ecology	

2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

## Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
Complete one of the following:		4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
<b>Science Elective (Earth)</b>		
Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	
<b>Supplemental Credit</b>		
3 semester hours from the following course count toward the mathematics/science requirement:		3
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 2335	Environmental Engineering Chemistry	
1 semester hour from the following course counts toward the mathematics/science requirement:		1
CIVE 3430	Engineering Microbiology and Ecology	

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	1
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**Professional Development**

**Code Title Hours**

**Professional Development**

GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	1
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**Landscape Architecture Requirements**

**Code Title Hours**

ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310 and ARCH 1311	Buildings and Cities, A Global History and Recitation for ARCH 1310	4
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2240	Sustainable Site Construction and Detailing	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 2430	Plants, People, and Landscape Change	4
LARC 2440	Planting Design	4
LARC 5420	Professional Practice in Landscape Architecture	4

**Writing Requirements**

**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

**Integrative Courses**

**Code Title Hours**

CIVE 4765	Senior Design Project—Environmental	5
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**Engineering GPA Requirement**

Minimum 2.000 GPA required in all major courses

**Landscape Architecture GPA Requirement**

Minimum 2.500 GPA required in all major courses

**Program Requirements**

143 total semester hours required

**Plan of Study**

**Four Years, 1 Co-op in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	4
CHEM 1153	0	ARCH 1120 (EI, ND)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						
		17			18		
						9	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2334	4	ARCH 1310 (IC, DD)	4	CIVE 2221	4	Co-op	
LARC 2230 (ND)	4	ARCH 1311	0	CIVE 2222	0		
LARC 2430 (ND)	4	CIVE 2260	4	GE 3300	4		
MATH 2341	4	CIVE 2261 (AD)	1				
		CIVE 2335	4				
		CIVE 3430	4				
		ENCP 2000	1				
		16			18		
						8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 2331	4	ENGW 3302 (WD)	4	Vacation	
		LARC 2240	4	Science Elective (Earth)	4		
		LARC 2340 (IC, SI, WI)	4				
		LARC 2440	4				
		0			16		
						8	0

**Year 4**

Fall	Hours	Spring	Hours
CIVE 3435	4	CIVE 4765 (EI, CE, WI)	5
CIVE 3464	4	CIVE 5300	2
CIVE 4534 (WI)	3	CIVE 5301	2
CIVE 4535	1	LARC 5420	4
ENCP 3000	1	Environmental Tech. Elective	3



Environmenta Tech. Elective	4			
	17	16		

Total Hours: 143

### Five Years, 3 Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ARCH 1110 (EI)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	ARCH 1120 (EI, ND)	6	PHYS 1151 (ND)	3		
ENGW 1111 (WF)	4	GE 1502 (ER)	4	PHYS 1152 (AD)	1		
GE 1000	1	MATH 1342 (FQ)	4	PHYS 1153	1		
GE 1501	4						
MATH 1341 (FQ)	4						
	17		18		9		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2334	4	ARCH 1310 (IC, DD)	4	CIVE 2221	4	Co-op	
LARC 2230 (ND)	4	ARCH 1311	0	CIVE 2222	0		
LARC 2430 (ND)	4	CIVE 2260	4	GE 3300	4		
MATH 2341	4	CIVE 2261 (AD)	1				
		CIVE 2335	4				
		CIVE 3430	4				
		ENCP 2000	1				
	16		18		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 2331	4	ENGW 3302 (WD)	4	Co-op	
		CIVE 3435	4	Science Elective (Earth)	4		
		LARC 2440	4				
		Environmenta Tech. Elective	4				
	0		16		8		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 4534 (WI)	3	Vacation		Co-op	
		CIVE 4535	1				
		ENCP 3000	1				
		LARC 2240	4				
		LARC 2340 (IC, SI, WI)	4				

Environmenta Tech. Elective	3			
	0	16	0	0

#### Year 5

Fall	Hours	Spring	Hours
Co-op		CIVE 3464	4
		CIVE 4765 (EI, CE, WI)	5
		CIVE 5300	2
		CIVE 5301	2
		LARC 5420	4
	0		17

Total Hours: 143

## Architectural Engineering, Minor

Architectural engineering is a field of engineering that encompasses elements of civil engineering, mechanical engineering, architecture, and related fields to plan, design, and create buildings within the urban environment. It includes the architectural and structural design, mechanical systems design, computational controls and sensing, and sustainable engineering strategies.

The Department of Civil and Environmental Engineering recognizes the importance of interdisciplinary work and of exposing students to the great richness in a classroom of diverse students from multiple majors bringing their own perspectives. The prospect of engineering students in architecture classes and vice versa stands to benefit all the students, whether or not they are enrolled in the minor.

The minor in architectural engineering opens opportunities for students across the university who are interested in a unique and multidisciplinary approach to the built environment. For engineering students, this minor offers an opportunity to work in the built environment and to better understand architecture, while for architecture students this is an opportunity to acquire the technical knowledge of a course of study in an engineering minor.

A total of 20 semester hours (SH) are required to complete this minor. Students will be required to complete 8 SH of required courses and 12 SH of approved elective courses from several colleges and departments at the university. Students interested in this minor must contact the civil engineering academic advisor in order to declare the minor.

This minor in architectural engineering is designed for any major and is open to any undergraduate student at the university.

Students may double count no more than two courses with any major or graduate degree requirement, other than general electives.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs and recitations courses where specified.

### Required Courses

Code	Title	Hours
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4

ARCH 3210 and ARCH 3211	Environmental Systems and Recitation for ARCH 3210	4
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## Electives

### ARCHITECTURE ELECTIVES

Code	Title	Hours
Complete one of the following:		
ARCH 2240	Architectonic Systems	4
ARCH 2330 and ARCH 2331	Architecture and the City in the Nineteenth Century and Recitation for ARCH 2330	
ARCH 2340 and ARCH 2341	Modern Architecture and Recitation for ARCH 2340	
ARCH 5220	Integrated Building Systems	
LARC 2230	Introduction to Sustainable Site Planning and Design	
LARC 2240	Sustainable Site Construction and Detailing	

### ENGINEERING ELECTIVES

Code	Title	Hours
Complete one or two of the following:		
CIVE 2320 and CIVE 2321	Structural Analysis and Recitation for CIVE 2320	8
CIVE 2324	Concrete Structure Design	
CIVE 3425	Steel Structure Design	
CIVE 5281	Coastal Dynamics and Design	
CIVE 5363	Climate Science, Engineering Adaptation, and Policy	
CIVE 5520	Structural Systems	
CIVE 5522	Structural Systems Modeling	
CIVE 5699	Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)	
SBSY 5100	Sustainable Design and Technologies in Construction	
SBSY 5200	Sustainable Engineering Systems for Buildings	
SBSY 5250	Building Performance Simulation	
SBSY 5300	Information Systems for Integrated Project Delivery	
If only one course was taken above, complete one course from the following:		
GE 3300	Energy Systems: Science, Technology, and Sustainability	
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	
CIVE 4542	Foundation Engineering and Design	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	

## GPA Requirement

2.000 GPA required in the minor

## Civil Engineering, Minor

The minor in civil engineering opens opportunities for students across the university who are interested in gaining knowledge in urban

engineering through the core disciplines within the Department of Civil and Environmental Engineering.

A total of 16 semester hours are required to complete this minor. Students interested in this minor must contact the civil and environmental engineering academic advisor in order to declare the minor. This minor is not open to civil engineering or environmental engineering majors.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs and recitations courses where specified.

## Required Courses

Code	Title	Hours
Choose four courses from the following list:		
CIVE 2221	Statics and Solid Mechanics	16
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	
CIVE 2320	Structural Analysis	
CIVE 2324	Concrete Structure Design	
CIVE 2331	Fluid Mechanics and Hydraulics	
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
CIVE 2335	Environmental Engineering Chemistry	
CIVE 2340 and CIVE 2341	Geotechnical Engineering and Lab for CIVE 2340	
CIVE 3425	Steel Structure Design	
CIVE 3430	Engineering Microbiology and Ecology	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 3464	Probability and Engineering Economy for Civil Engineering	
CIVE 4534	Water Treatment Systems Design	
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4542	Foundation Engineering and Design	
CIVE 4554	Highway Design	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	
CIVE 4777	Climate Hazards and Resilient Cities Abroad	
CIVE 4780	Timber and Masonry Structures: Technology and Design Abroad	
CIVE 5271	Solid and Hazardous Waste Management	
CIVE 5221 and CIVE 5231	Construction Project Control and Organization and Alternative Project Delivery Systems in Construction	
CIVE 5260	Environmental Fluid Mechanics	
CIVE 5261	Dynamic Modeling for Environmental Investment and Policymaking	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
CIVE 5280	Remote Sensing of the Environment	
CIVE 5281	Coastal Dynamics and Design	

CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300
CIVE 5363	Climate Science, Engineering Adaptation, and Policy
CIVE 5373	Transportation Systems: Analysis and Planning
CIVE 5376	Traffic Engineering and Sustainable Urban Street Design
CIVE 5520	Structural Systems
CIVE 5522	Structural Systems Modeling
CIVE 5536	Hydrologic and Hydraulic Design
CIVE 5699	Special Topics in Civil Engineering (Vibration-based Structural Health Monitoring)
SBSY 5100	Sustainable Design and Technologies in Construction
SBSY 5200	Sustainable Engineering Systems for Buildings
SBSY 5250	Building Performance Simulation
SBSY 5300	Information Systems for Integrated Project Delivery

### GPA Requirement

2.000 GPA required in the minor

## Environmental Chemistry, Minor

The minor in environmental chemistry offers an opportunity for students of any background interested in environmental sciences to better understand the chemistry of the environment. Students completing the minor in environmental chemistry have an opportunity to learn about the chemical processes of natural systems and environmental pollutants, while earning a credential that highlights their interest and expertise. This can be a useful course of study whether their primary degree and career will be in one of the traditional chemical, environmental, or engineering programs, or another allied field. No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

### Minor Requirements

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

*Note:* No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

### Required Courses

Code	Title	Hours
<b>Environmental Chemistry Core</b>		
Complete one of the following:		4
CIVE 2335	Environmental Engineering Chemistry	
ENVR 3410	Environmental Geochemistry	
<b>Chemistry Core</b>		
Complete one of the following:		5
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	
CHEM 2331 and CHEM 2322	Bioanalytical Chemistry and Lab for CHEM 2321	

### Research Experience

Complete one of the following:		4
CHEM 4750	Senior Research	
CHEM 4901	Undergraduate Research	
CHEM 4992	Directed Study	
CIVE 4991	Research	
CIVE 4992	Directed Study	
ENVR 4900	Earth and Environmental Science Capstone	
or ENVR 4997	Senior Thesis	
ENVR 4992	Directed Study	

### Electives

Code	Title	Hours
Complete two of the following:		8-9
CIVE 2335	Environmental Engineering Chemistry (If not used to satisfy Environmental Chemistry Core)	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
ENVR 3125	Global Oceanic Change	
ENVR 3410	Environmental Geochemistry (If not used to satisfy Environmental Chemistry Core)	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4504	Environmental Pollution	
ENVR 4505	Wetlands	
ENVR 5190	Soil Science	

### GPA Requirement

Minimum 2.000 GPA required in all major courses

### Credit Requirement

Minimum of 21 hours required

## Electrical and Computer Engineering

Website (<http://www.ece.neu.edu>)

### Srinivas Tadigadapa, PhD

Professor and Chair

409 Dana Research Center

617.373.7529

617.373.4431 (fax)

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. BS, MS, and PhD degrees are offered in both electrical and computer engineering.

## Overview of Programs Offered

Please see the programs tab (p. 459) for a list of the department's academic programs.

Successful engineers need to organize and adapt information to solve problems. They also must work effectively in teams and communicate well. Therefore, the goal of the electrical engineering and computer engineering programs is to help students develop these skills and provide the appropriate technical background for a successful career.

The curricula are continuously assessed to ensure that graduates can achieve these goals and go on to succeed as professional electrical or computer engineers. The Bachelor of Science programs allow students sufficient flexibility within the standard eight academic semesters to earn a minor in nearly any department in the university. Typical minors might include physics, math, computer science, or business, but students might also organize their course of study to earn a minor in economics, English, or music.

The academic program is supported by extensive laboratory facilities for study and experimentation in computing, circuit analysis, electronics, digital systems, microwaves, control systems, semiconductor processing, very large-scale integration (VLSI) design, and digital signal processing. Students have access to state-of-the-art computing facilities, including numerous Linux and Windows-based workstations. Two introductory electrical and computer engineering courses meet in integrated lab-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.

## Mission of the Department

The primary educational missions of the Department of Electrical and Computer Engineering are to educate undergraduate students so they have the opportunity to obtain successful careers in electrical and computer engineering and related disciplines and pursue advanced study, such as graduate study in engineering or related disciplines, and to educate graduate students so they can make meaningful contributions to the research and industrial communities.

## Other Programmatic Features

More than 90 percent of department undergraduates take advantage of the cooperative education program. During the cooperative work phase of the program, the students' levels of responsibility grow as they gain theoretical and technical knowledge through academic work. A sophomore might begin cooperative work experience as an engineering assistant and progress by the senior year to a position with responsibilities similar to those of entry-level engineers.

The department also offers significant research opportunities throughout all fields of electrical and computer engineering, including participating in research centers based in our department and college.

A senior-year design course caps the education by drawing on everything learned previously. Teams of students propose, design, and build a functioning electrical or computer engineering system—just as they might in actual practice.

## Programs

### Bachelor of Science in Computer Engineering (BSCompE)

- Computer Engineering (p. 459)
- Computer Engineering and Physics (p. 463)
- Computer Engineering and Computer Science (p. 317)

### Bachelor of Science in Electrical Engineering (BSEE)

- Electrical Engineering (p. 469)
- Electrical Engineering and Physics (p. 472)
- Electrical Engineering and Music with Concentration in Music Technology (p. 220)

### Combined Major (BSEE or BSCompE)

- Electrical and Computer Engineering (p. 477)

## Minors

- Biomedical Engineering (p. 480)
- Computer Engineering (p. 481)
- Computational Data Analytics (p. 481)
- Electrical Engineering (p. 482)
- Robotics (p. 483)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements and, if these are not fulfilled in engineering courses, should use general electives to do so.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4
<b>Electrical Engineering Fundamentals</b>		
If more than one electrical engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Complete four of the following:		16
EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5155 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	

Two CS/CY/IS courses from the following approved list may be taken toward the EECE technical elective requirement.

CS 3200	Database Design
CS 3500	Object-Oriented Design
CS 3540 to CS 3800	
CS 4100 to CS 4770	
CS 4850	Building Game Engines
CY 2550	Foundations of Cybersecurity
IS 4200 to IS 4700	

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

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

## Supporting Courses: Mathematics/Science Requirement

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

## Professional Development

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement:  
 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 Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 SH of academic, nonremedial, nonrepetitive courses.		28

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**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		
CHEM 1151 (ND)	4	GE 1502 (ER)	4	General Elective	4	Vacation	0		
CHEM 1153	0	MATH 1342 (FQ)	4	General Elective	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3						
GE 1000	1	PHYS 1152 (AD)	1						
GE 1501	4	PHYS 1153	1						
MATH 1341 (FQ)	4	General Elective	4						
		17			17			8	0

Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
EECE 2160	4	CS 1800 (FQ)	4	MATH 3081 (AD)	4	Co-op	0		
MATH 2341	4	CS 1802	1	General Elective	4				
PHYS 1155 (ND)	3	EECE 2150 (AD)	5						
PHYS 1156 (AD)	1	ENCP 2000	1						
PHYS 1157	1	CE Fundamentals	4						
General Elective	4	CE Fundamentals	5						
		17			20			8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op	0	ENCP 3000	1	EECE 4790 (EI, CE, WI)	4	Co-op	0		
ENGW 3302 or 3315 (to be taken online) (WD)	4	CE Fundamental:	4	EECE Technical Elective	4				
		EE Fundamentals	4						
		EECE Technical Elective	4						
		General Elective	4						
		4			17			8	0

**Year 4**

Fall	Hours	Spring	Hours		
Co-op	0	EECE 4792 (EI, CE, WI)	4		
		EECE Technical Elective	4		
		EECE Technical Elective	4		
		General Elective	4		
		0			16

Total Hours: 132

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

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
CHEM 1151 (ND)	4	GE 1502 (ER)	4	General Elective	4	Vacation	0		
CHEM 1153	0	MATH 1342 (FQ)	4	General Elective	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3						
GE 1000	1	PHYS 1152 (AD)	1						
GE 1501	4	PHYS 1153	1						
MATH 1341 (FQ)	4	General Elective	4						
		17			17			8	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2160	4	Co-op	0	Co-op	0	MATH 3081 (AD)	4
ENCP 2000	1					General Elective	4
MATH 2341	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						



462 Computer Engineering, BSCompE

General Elective	4				
	18	0	0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	Co-op	0	Co-op	0	EECE 4790 (EI, CE, WI)	4
CS 1802	1	ENGW 3302 or 3315 (to be taken online) (WD)	4			EECE Technical Elective	4
EECE 2150 (AD)	5						
ENCP 3000	1						
CE Fundamentals	4						
General Elective	4						
	19		4		0		8

**Year 4**

Fall	Hours	Spring	Hours
CE Fundamentals	4	EECE 4792 (EI, CE, WI)	4
CE Fundamentals	5	EECE Technical Elective	4
EE Fundamentals	4	EECE Technical Elective	4
EECE Technical Elective	4	General Elective	4
	17		16

Total Hours: 132

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2160	4	CS 1800 (FQ)	4	Vacation	0	Co-op	0
MATH 2341	4	CS 1802	1				
PHYS 1155 (ND)	3	EECE 2150 (AD)	5				

PHYS 1156 (AD)	1	ENCP 2000	1
PHYS 1157	1	CE Fundamentals	4
General Elective	4	General Elective	4
	17		19
			0
			0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CE Fundamentals	5	ENGW 3302 or 3315 (WD)	4	Co-op	0
		CE Fundamental	4	General Elective	4		
		EE Fundamentals	4				
		General Elective	4				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	EECE 4790 (EI, WI, CE)	4	Co-op	0
		MATH 3081 (AD)	4	EECE Technical Elective	4		
		EECE Technical Elective	4				
		EECE Technical Elective	4				
		General Elective	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	EECE 4792 (EI, WI, CE)	4
		EECE Technical Elective	4
		General 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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				

MATH 1341 (FQ)	4	General Elective	4				
	17		17	0	0		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2160	4	Co-op		Co-op		Vacation	
ENCP 2000	1						
MATH 2341	4						
PHYS 1155 (ND)	3						
PHYS 1156 (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 (FQ)	4	Co-op		Co-op		ENGW 3302 or 3315 (WD)	4
CS 1802	1					General Elective	4
EECE 2150 (AD)	5						
CE Fundamentals	4						
General Elective	4						
	18		0	0			8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op		Co-op		EECE 4790 (EI, WI, CE)	4
CE Fundamentals	4					EECE Technical Elective	4
CE Fundamentals	5						
EE Fundamentals	4						
General Elective	4						
	18		0	0			8

**Year 5**

Fall	Hours	Spring	Hours
EECE 4792 (EI, WI, CE)	4	EECE Technical Elective	4
MATH 3081 (AD)	4	EECE Technical Elective	4
EECE Technical Elective	4	General Elective	4

General Elective	4		
	16	12	

Total Hours: 132

**Computer Engineering and Physics, BSCompE**

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of an accredited Bachelor of Science degree in engineering. The dual major combines a major in physics from the Department of Physics in the College of Arts and Sciences with the Bachelor of Science in Computer Engineering degree from the Department of Electrical and Computer Engineering.

Because of the large body of shared knowledge between computer engineering and physics, an integrated dual major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op placements) without requiring course overloading in any semester. A student graduating from this program will have studied both the physical fundamentals and computer systems.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Physics as early as possible, preferably prior to registering for freshman courses.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements through general electives.

**Engineering**

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4
<b>Electrical Engineering Fundamentals</b>		

If more than one electrical engineering fundamentals course is taken, it can count as a technical elective.

Complete one of the following: 4

EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	

#### Computer Engineering Capstone Courses

EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4

#### Technical Electives

Students can register for EECE 4991 / EECE 4992 / EECE 4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.

Complete two of the following: 8

EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5155 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	

One CS/CY/IS course from the following approved list may be taken toward the EECE technical elective requirement:

CS 3200	Database Design	
CS 3500	Object-Oriented Design	
CS 3540 to CS 3800		
CS 4100 to CS 4770		
CS 4850	Building Game Engines	
CY 2550	Foundations of Cybersecurity	
IS 4200 to IS 4700		

#### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2	
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#### Mathematics/Science

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5

MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

MATH 3081	Probability and Statistics	4
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Complete one of the following: 5

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
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PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
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Complete one of the following: 5

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
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PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	
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PHYS 2303	Modern Physics	4
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PHYS 3600	Advanced Physics Laboratory	4
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PHYS 3602	Electricity and Magnetism 1	4
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PHYS 4115	Quantum Mechanics I	4
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PHYS 4305	Thermodynamics and Statistical Mechanics	4
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#### Advanced Physics Elective

Complete one of the following: 4

MATH 4606	Mathematical and Computational Methods for Physics	
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PHYS 3600 to PHYS 7999

#### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	
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#### Professional Development

Code	Title	Hours
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##### Required Professional Development

GE 1000	Introduction to the Study of Engineering	1
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ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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##### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:

GE 1501	Cornerstone of Engineering 1	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	
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#### Writing Requirements

Code	Title	Hours
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A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 8 SH of academic, nonremedial, nonrepetitive courses.	8

**Integrative Requirement**

The following course, which counts toward the engineering requirement above, is an integrative course:

Code	Title	Hours
EECE 4790	Electrical and Computer Engineering Capstone 1	4

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation
CHEM 1153	0	MATH 1342 (FQ)	4			
GE 1000	1	PHYS 1165 (ND)	4			
GE 1501	4	PHYS 1166 (AD)	1			
MATH 1341 (FQ)	4	PHYS 1167	0			
PHYS 1161 (ND)	4	ENGW 1111	4			
PHYS 1162 (AD)	1					
PHYS 1163	0					
	18		17		0	0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
EECE 2160	4	CS 1800 (FQ)	4	Vacation	0	Co-op
MATH 2321 (FQ)	4	CS 1802	1			
MATH 2341	4	EECE 2150 (AD)	5			
PHYS 2303 (ND)	4	ENCP 3000	1			
		PHYS 3602 (ND)	4			

CE	4		
Fundamental:			
	16	19	0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	ENGW 3302 or 3315 (WD)	4	PHYS 3600 (ND, AD, WI)	4	Co-op
		PHYS 4115 (ND, FQ)	4	General Elective	4	
		CE	5	Fundamentals		
		EE	4	Fundamental:		
	0		17		8	0

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	ENCP 3000	1	EECE 4790 (EI, WI, CE)	4	Co-op
		MATH 3081 (AD)	4	EECE Technical Elective	4	
		PHYS 4305 (ND)	4			
		CE	4	Fundamental:		
		General Elective	4			
	0		17		8	0

Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	EECE 4792 (EI, WI, CE)	4			
		EECE Technical Elective	4			
		PHYS Advanced Elective	4			
	0		12			

Total Hours: 132

**Notes on Physics courses in Plans of Study**

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

**PHYSICS COURSES OFFERING SCHEDULE (SUBJECT TO CHANGES)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring

- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4

<b>Computer Engineering Fundamentals</b>		
CS 3000	Algorithms and Data	4
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
<b>Electrical Engineering Fundamentals</b>		
Complete one of the following: 4		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	
<b>Computer Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Complete two of the following: 8		
EECE 2412 to EECE 2530		
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5155 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	
<b>CS/IS/CY Technical Electives 8</b>		
Complete two of the following:		
CS 3200	Database Design	
CS 3520	Programming in C++	
CS 3540	Game Programming	
CS 3700	Networks and Distributed Systems	
CS 3800	Theory of Computation	
CS 4100 to CS 4410		
CS 4510 to CS 4650		
CS 4740 to CS 4760		
CS 4850	Building Game Engines	
CY 2550	Foundations of Cybersecurity	
CY 3740	Systems Security	
IS 4200 to IS 4700		
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement: 2		
GE 1501	Cornerstone of Engineering 1	

3 semester hours from the following course count toward the engineering requirement:	3
GE 1502 Cornerstone of Engineering 2	

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

#### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement:	1
GE 1501 Cornerstone of Engineering 1	

### Professional Development

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:	1
GE 1501 Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development requirement:	1
GE 1502 Cornerstone of Engineering 2	

### Computer Science Requirements

Code	Title	Hours
<b>Computer Science Introductory Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Upper-Level Courses</b>		
CS 3500	Object-Oriented Design	4

CS 3650	Computer Systems	4
CS 4500	Software Development	4

### Writing Requirements

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 8 SH of academic, nonremedial, nonrepetitive courses.		8

### 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 and PHYS 1152	Physics for Engineering 1 and Lab for PHYS 1151	4
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4

### Major GPA Requirement

2.000 minimum GPA in EECE courses

2.000 minimum GPA required in all CS, CY, DS, and IS courses

### Program Requirement

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 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
		17		17		0	



**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	CS 2510 (ND, AD)	4	Vacation	0	Co-op	0
CS 1802	1	CS 2511	1				
CS 2500 (ND, FQ)	4	CS 2800	4				
CS 2501	1	CS 2801	1				
MATH 2341	4	EECE 2160	4				
PHYS 1155 (ND)	3	ENCP 2000	1				
PHYS 1156 (AD)	1	General Elective	4				
PHYS 1157	1						
	19		19		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 3650	4	CS 3500 (ND, AD)	4	Co-op	0
		EECE 2150 (AD)	5	ENGW 3302 or 3315 (WD)	4		
		CE Fundamentals	4				
		CE Fundamentals	5				
	0		18		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	CS 3000	4	Co-op	0
		MATH 3081 (AD)	4	EECE 4790 (EI, WI, CE)	4		
		CE Fundamentals	4				
		CS Technical Elective	4				
		EE Fundamentals	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CS 4500 (WI)	4
		EECE 4792 (EI, WI, CE)	4
		EECE Technical Elective	4
		EECE Technical Elective	4
	0		16

Total Hours: 139

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	Co-op	0	Co-op	0	Vacation	0
CS 1802	1						
CS 2500 (ND, FQ)	4						
CS 2501	1						
ENCP 2000	1						
MATH 2341	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
	20		0		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 2510 (ND, AD)	4	Co-op	0	Co-op	0	ENGW 3302 or 3315 (WD)	4
CS 2511	1					MATH 3081 (AD)	4
CS 2800	4						
CS 2801	1						
EECE 2150 (AD)	5						
EECE 2160	4						
	19		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500 (ND, AD)	4	Co-op	0	Co-op	0	CS 3000	4
CS 3650	4					EECE 4790 (EI, WI, CE)	4
ENCP 3000	1						
CE Fundamentals	4						
CE Fundamentals	5						
	18		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
EECE 4792 (EI, WI, CE)	4	CS 4500 (WI)	4
CE Fundamentals	4	EECE Technical Elective	4
CS Technical Elective	4	EECE Technical Elective	4
EE Fundamentals	4	General Elective	4
	16		16

Total Hours: 139

**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. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by

required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Engineering**

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
If more than one computer engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>Electrical Engineering Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Complete four of the following:		16
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540 to EECE 2750		
EECE 3324 to EECE 3410		
EECE 4512 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5155 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
EECE 3468	Noise and Stochastic Processes	

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2	
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### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

#### Supplemental Credit

2 semester hours from the following course count toward the mathematics/science requirement: 2

EECE 3468	Noise and Stochastic Processes	
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	
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### Professional Development

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

#### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	
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### Writing Requirements

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4

or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
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### Required General Electives

Code	Title	Hours
Complete 28 SH of academic, nonremedial, nonrepetitive courses.		28

### Major GPA Requirement

Minimum 2.000 GPA required in EECE courses

### Program Requirement

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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	General Elective	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	General Elective	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
		17			17	8	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 (AD)	5	EECE 2160	4	General Elective	4	Co-op	0
MATH 2341	4	ENCP 2000	1	General Elective	4		
PHYS 1155 (ND)	3	MATH 2321 (FQ)	4				
PHYS 1156 (AD)	1	EE Fundamentals:	5				
PHYS 1157	1	EE Fundamentals	4				
General Elective	4						
		18			18	8	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	EECE 3468	4	EECE 4790 (EI, CE, WI)	4	Co-op	0
ENGW 3302 or 3315 (to be taken online) (WD)	4	ENCP 3000	1	EECE Technical Elective	4		
		CE Fundamentals	4				
		EE Fundamentals:	5				

	EECE Technical Elective	4			
		4	18	8	0

**Year 4**

Fall	Hours	Spring	Hours	Spring	Hours
Co-op	0	EECE 4792 (EI, CE, WI)	4		
		EECE Technical Elective	4		
		EECE Technical Elective	4		
		General Elective	4		
	0		16		

Total Hours: 132

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	General Elective	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	General Elective	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 (AD)	5	Co-op	0	Co-op	0	General Elective	4
ENCP 2000	1					General Elective	4
MATH 2341	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
General Elective	4						
	19		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2160	4	Co-op	0	Co-op	0	EECE 4790	4
ENCP 3000	1	ENGW 3302 or 3315 (to be taken online) (WD)	4			EECE Technical Elective	4

MATH 2321 (FQ)	4				
EE Fundamentals	4				
EE Fundamentals	5				
	18		4		0
					8

**Year 4**

Fall	Hours	Spring	Hours	Spring	Hours
EECE 3468	4	EECE 4792 (EI, CE, WI)	4		
CE Fundamentals	4	EECE Technical Elective	4		
EE Fundamentals	5	EECE Technical Elective	4		
EECE Technical Elective	4	General Elective	4		
	17		16		

Total Hours: 132

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 (AD)	5	EECE 2160	4	Vacation	0	Co-op	0
MATH 2341	4	ENCP 2000	1				
PHYS 1155 (ND)	3	MATH 2321 (FQ)	4				
PHYS 1156 (AD)	1	EE Fundamentals	4				
PHYS 1157	1	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	CE Fundamentals	4	ENGW 3302 or 3315 (WD)	4	Co-op	0

EE Fundamentals	5	General Elective	4
EE Fundamentals	5		
General Elective	4		
	0	18	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	EECE 3468	4	EECE 4790 (EI, WI, CE)	4	Co-op	0
		ENCP 3000	1	EECE Technical Elective	4		
		EECE Technical Elective	4				
		General Elective	4				
		General Elective	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	EECE 4792 (EI, WI, CE)	4
		EECE Technical Elective	4
		EECE Technical 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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 (AD)	5	Co-op	0	Co-op	0	Vacation	0
ENCP 2000	1						
MATH 2341	4						

PHYS 1155 (ND)	3
PHYS 1156 (AD)	1
PHYS 1157	1
General Elective	4
	19

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2160	4	Co-op	0	Co-op	0	ENGW 3302 or 3315 (WD)	4
MATH 2321 (FQ)	4					General Elective	4
EE Fundamentals	4						
General Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op	0	Co-op	0	EECE 4790 (EI, WI, CE)	4
CE Fundamentals	4					EECE Technical Elective	4
EE Fundamentals	5						
EE Fundamentals	5						
General Elective	4						
	19		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
EECE 3468	4	EECE Technical Elective	4
EECE 4792 (EI, WI, CE)	4	EECE Technical Elective	4
EECE Technical Elective	4	General Elective	4
General Elective	4		
	16		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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
If more than one computer engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4

EECE 4792	Electrical and Computer Engineering Capstone 2	4
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### EECE Technical Electives

Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.

Complete two of the following: 8-9

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540 to EECE 2750		
EECE 3324 to EECE 3410		
EECE 4512 to EECE 4698		
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5155 to EECE 5698		
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement: 2

EECE 3468	Noise and Stochastic Processes	
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2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2	
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## Mathematics/Science

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
Complete one of the following:		5



PHYS 1155 Physics for Engineering 2  
and PHYS 1156 and Lab for PHYS 1155  
and PHYS 1157 and Interactive Learning Seminar for  
PHYS 1155

PHYS 1165 Physics 2  
and PHYS 1166 and Lab for PHYS 1165  
and PHYS 1167 and Recitation for PHYS 1165

PHYS 2303	Modern Physics	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

**Advanced Physics Elective**

Complete one of the following: 4

MATH 4606 Mathematical and Computational  
Methods for Physics  
PHYS 3600 to PHYS 7999

**Supplemental Credit**

2 semester hours from the following course count toward the  
mathematics/science requirement: 2

EECE 3468 Noise and Stochastic Processes

1 semester hour from the following course counts toward the  
mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement: 1		
GE 1501	Cornerstone of Engineering 1	1
1 semester hour from the following course counts toward the professional development requirement: 1		
GE 1502	Cornerstone of Engineering 2	1

**Additional Required Courses**

1 semester hour from the following course counts toward the  
professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the  
professional development requirement: 1

GE 1502 Cornerstone of Engineering 2

**Writing Requirement and NUPath Courses**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 12 SH of academic, nonremedial, nonrepetitive courses. 12		

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**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
ENGW 1111 (WF)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 (AD)	1				
PHYS 1161 (ND)	4	PHYS 1167	0				
PHYS 1162 (AD)	1	CHEM 1151 and CHEM 1153	4				
PHYS 1163	0						
	18		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 (AD)	5	EECE 2160	4	Vacation	0	Co-op	0
MATH 2321 (FQ)	4	ENCP 2000	1				
MATH 2341	4	PHYS 3602 (ND)	4				
PHYS 2303 (ND)	4	EE Fundamental: General Elective	4				
	17		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3302 or 3315 (WD)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
		PHYS 4115 (ND, FQ)	4	General Elective	4		
		CE Fundamentals	4				
		EE Fundamental:	5				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	EECE 3468	4	EECE 4790 (EI, WI, CE)	4	Co-op	0
		ENCP 3000	1	EECE Technical Elective	4		

PHYS 4305 (ND)	4			
EE Fundamentals	5			
EECE Technical Elective	4			
	0	18	8	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	EECE 4792 (EI, WI, CE)	4
		PHYS Advanced Elective	4
		General Elective	4
		General Elective	4
	0		16

Total Hours: 136

**Notes on Physics courses in Plans of Study**

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

**Physics courses offering schedule (subject to changes)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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 Requirements**

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
	Complete one of the following. If more than one computer engineering fundamentals course is taken, it may count as a technical elective:	4-5
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>Technical Electives</b>		
	Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.	
	Complete two of the following. If EECE 5697 is taken, students are required to complete a music elective.	8

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2750	Enabling Engineering	
EECE 3324	Computer Architecture and Organization	
EECE 3410	Electronic Design	
EECE 4512	Healthcare Technologies: Sensors, Systems, and Analysis	
EECE 4991	Research	
EECE 4992	Directed Study	
EECE 4993	Independent Study	
EECE 5155	Wireless Sensor Networks and the Internet of Things	
EECE 5698	Special Topics in Electrical and Computer Engineering	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

EECE 3468	Noise and Stochastic Processes	
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2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1	
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2	
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**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

2 semester hours from the following course count toward this requirement: 2

EECE 3468	Noise and Stochastic Processes	
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	
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**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	
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**Music Requirements**

Code	Title	Hours
<b>Music Theory</b>		
Complete one of the following pairs:		8
MUSC 1119 and MUSC 1201	Fundamentals of Western Music Theory and Music Theory 1	
MUSC 1201 and MUSC 1202	Music Theory 1 and Music Theory 2	
MUSC 1202 and MUSC 3541	Music Theory 2 and Music Analysis Seminar	

**Required Context Course**

MUSC 1001	Music in Everyday Life	4
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**Music in Context**

Complete one of the following:		4
MUSC 2101	Black Popular Music	
MUSC 2107	Introduction to Opera	
MUSC 2130	Music of Asia	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 2312	Historical Traditions: Classical	
MUSC 2317	Punk Rock	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3470	War and Music	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 3351	Music and Social Justice	
MUSI 5900	Ethnography in Creative Industries	

**Acoustics or Music Elective**

Complete one of the following. If EECE 5697 is taken, students are required to complete a music elective. 4

MUSC 2350	Acoustics and Psychoacoustics of Music	
MUSC 2000 to MUSC 5999		

**Music Technology**

MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4
<b>Music Technology Electives</b>		
Complete two of the following. Other appropriate MUST courses will be considered by petition to fulfill this category.		8
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 4520	Interactive Music Programming	
MUST 4610	Composition for Electronic Instruments	

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 4 SH of academic, nonremedial, nonrepetitive courses.		4

**Major GPA Requirement**

Minimum 2.000 GPA required in EECE courses

**Music Technology Major Grade Requirement**

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

**Program Requirement**

136 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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation		Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	MUST 1220 (AD)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
		17			17		
					0		
					0		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 (AD)	5	Co-op		Co-op		Vacation	
ENCP 2000	1						
MATH 2341	4						
MUST 2431 (FQ, AD)	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
		19			0	0	
					0	0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2160	4	Co-op		Co-op		ENGW 3302 or 3315	4
MATH 2321 (FQ)	4					General Elective	4
MUSC 1001 (EI, IC)	4						
EE Fundamentals	5						
		17			0	0	
					0	8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op		Co-op		EECE 4790 (EI, CE, WI)	4
CE Fundamentals	4					ECE Tech Elective	4
EE Fundamentals	4						
EE Fundamentals	5						
Music Tech Elective	4						
		18			0	0	
					0	8	

Year 5			
Fall	Hours	Spring	Hours
EECE 3468	4	ECE Tech Elective	4
EECE 4792 (EI, CE, WI)	4	Music in Context	4
Music Tech Elective	4	Music Elective	4
Music Theory Course	4	Music Theory Course	4
		16	16

Total Hours: 136

**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 Electrical Engineering or Bachelor of Science

in Computer Engineering. Students take the required courses for both majors along with technical electives distributed among the areas of computer engineering; fields, waves, and optics; signals and systems; power engineering; and electronic circuits and devices. Additional NUPath requirements must be fulfilled using general electives.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4
<b>Electrical and Computer Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Complete four of the following:		16
EECE 2750	Enabling Engineering	
EECE 3324 to EECE 3410		

EECE 4512 to EECE 4698	
EECE 4991	Research
EECE 4992	Directed Study
EECE 4993	Independent Study
EECE 5155 to EECE 5698	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage
GE 4608	Introduction to Nanotechnology in Engineering

Two CS/CY/IS courses from the following approved list may be taken toward the EECE technical elective requirement.

CS 3200	Database Design
CS 3500	Object-Oriented Design
CS 3540 to CS 3800	
CS 4100 to CS 4770	
CS 4850	Building Game Engines
CY 2550	Foundations of Cybersecurity
IS 4200 to IS 4700	

## Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:	2
EECE 3468	Noise and Stochastic Processes
2 semester hours from the following course count toward the engineering requirement:	2
GE 1501	Cornerstone of Engineering 1
3 semester hours from the following course count toward the engineering requirement:	3
GE 1502	Cornerstone of Engineering 2

## Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

## Supplemental Credit

2 semester hours from the following course count toward the mathematics/science requirement:	2
EECE 3468	Noise and Stochastic Processes

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1	1
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**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1	1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2	1
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**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 16 SH of academic, nonremedial, nonrepetitive courses.		16

**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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation		Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
		17			17	0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 or 2160 (AD)	5	Co-op		Co-op		Vacation	

ENCP 2000	1				
MATH 2341	4				
PHYS 1155 (ND)	3				
PHYS 1156 (AD)	1				
PHYS 1157	1				
General Elective	4				
		19			0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	Co-op		Co-op		ENGW 3302 or 3315 (WD)	4
CS 1802	1					General Elective	4
EECE 2160 or 2150	4						
MATH 2321 (FQ)	4						
EE or CE Fundamentals	4						
		17			0	0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op		Co-op		EECE 4790 (EI, CE, WI)	4
EE or CE Fundamentals	4					EECE Technical Elective	4
EE or CE Fundamentals	4						
EE or CE Fundamentals	5						
EE or CE Fundamentals	5						
		19			0	0	

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 3468	4	EECE Technical Elective	4				
EECE 4792 (EI, CE, WI)	4	EECE Technical Elective	4				
EE or CE Fundamentals	5	General Elective	4				
EECE Technical Elective	4						
		17			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
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation		Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
		17	17		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2150 or 2160 (AD)	5	Co-op		Co-op		Vacation	
ENCP 2000	1						
MATH 2341	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
General Elective	4						
		19	0		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 (FQ)	4	Co-op		Co-op		ENGW 3302 or 3315 (WD)	4
CS 1802	1					General Elective	4
EECE 2160 or 2150	4						
MATH 2321 (FQ)	4						
EE or CE Fundamentals	4						
		17	0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op		Co-op		EECE 4790 (EI, CE, WI)	4
EE or CE Fundamentals	4					EECE Technical Elective	4
EE or CE Fundamentals	4						
EE or CE Fundamentals	5						
EE or CE Fundamentals	5						
		19	0		0		8

Year 5			
Fall	Hours	Spring	Hours
EECE 3468	4	EECE Technical Elective	4
EECE 4792 (EI, CE, WI)	4	EECE Technical Elective	4
EE or CE Fundamentals	5	General Elective	4
EECE Technical Elective	4		
		17	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.

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

**Required Biology**

Code	Title	Hours
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5

**Required Engineering**

The course you select may also count toward your major.

Code	Title	Hours
Complete one of the following:		
EECE 4512	Healthcare Technologies: Sensors, Systems, and Analysis	4
EECE 5698	Special Topics in Electrical and Computer Engineering	
EECE 4993	Independent Study (must have a biomedical-engineering focus)	

**Required Capstone-Design Courses**

Complete the following two courses on a biologically oriented project:

Code	Title	Hours
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4

### Elective Courses

One course must be outside your home department. Neither course can be used toward your major.

Code	Title	Hours
Complete two of the following:		8-10

#### Biology

BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	
BIOL 2299	Inquiries in Biological Sciences	
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	
BIOL 3405	Neurobiology	
BIOL 5581	Biological Imaging	

#### Chemical Engineering

CHME 5630	Biochemical Engineering	
CHME 5699	Special Topics in Chemical Engineering	

#### Civil/Industrial Engineering

CIVE 7251	Environmental Biological Processes	
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#### Electrical/Computer Engineering

EECE 4512	Healthcare Technologies: Sensors, Systems, and Analysis	
EECE 4649	Biomedical Imaging	
EECE 5698	Special Topics in Electrical and Computer Engineering	
EECE 4993	Independent Study	

#### Mechanical/Industrial Engineering

ME 5665	Musculoskeletal Biomechanics	
IE 4522	Human-Machine Systems	

#### Physics

PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	

#### Psychology

PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	

### GPA Requirement

2.000 GPA required in the minor

### Computer Engineering, Minor

A minor in computer engineering is particularly designed for the student who would like a coherent background in the theory and laboratory practice of computer engineering. This minor is not open to students in the Department of Electrical and Computer Engineering.

### Minor Requirements

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

This minor is not open to students in the Department of Electrical and Computer Engineering.

Complete a total of four courses for the minor.

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

### Required Core Course

Code	Title	Hours
EECE 2160	Embedded Design: Enabling Robotics	4

### Required Fundamental Courses

Code	Title	Hours
Complete two of the following:		8-9
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	

### Computer Engineering Technical Elective

Fundamentals not taken to satisfy the above requirement may be used as a technical elective.

Code	Title	Hours
Complete one of the following:		4-5
EECE 4993	Independent Study	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to Nanotechnology in Engineering	
EECE 2322 to EECE2750		
EECE3324 to EECE 4698		
EECE 5576 to EECE 5698		

### GPA Requirement

2.000 GPA required in the minor

### Computational Data Analytics, Minor

This minor, offered by the Department of Electrical and Computer Engineering in the College of Engineering, seeks to provide a coherent technical foundation in the fundamentals and application of data analytics. The minor addresses the growing demand in industry to be able to apply background in probability/statistics, calculus, engineering problem solving, computing, and analytical principles/tools to identify patterns and trends, find clusters and outliers, and characterize/summarize the mountain of data being generated in our world. This program leverages faculty expertise in electrical and computer engineering and includes courses from across the College of Engineering, College of Science, and the Khoury College of Computer Sciences

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

### Minor Requirements

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

*Note:* Students need to complete the program requirements with at least three courses that are not part of their major required course work.

### Required Courses

Code	Title	Hours
EECE 2300	Computational Methods for Data Analytics (not required for EECE majors)	4
EECE 5644	Introduction to Machine Learning and 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 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. This minor is not open to students in the Department of Electrical and Computer Engineering.

### Minor Requirements

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

This minor is not open to students in the Department of Electrical and Computer Engineering because of overlap with the majors.

Complete a total of four courses for the minor.

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

### Required Core Course

Code	Title	Hours
Complete one of the following:		5
EECE 2150	Circuits and Signals: Biomedical Applications	
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	

### Fundamental Core Courses

Code	Title	Hours
Complete two of the following:		9-10
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	
EECE 2520	Fundamentals of Linear Systems	
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	

### Electrical Engineering Technical Electives

Code	Title	Hours
Fundamentals not taken to satisfy the above requirement may be used as a technical elective.		
Complete one of the following:		4
EECE 4993	Independent Study	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage	
GE 4608	Introduction to 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.

### Program Requirements

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

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

### Required Courses

Code	Title	Hours
ME 3460	Robot Dynamics and Control	4
Complete one of the following:		4
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	
EECE 2160	Embedded Design: Enabling Robotics	

### Electives

Code	Title	Hours
Complete three of the following:		12
EECE 4626	Image Processing and Pattern Recognition	
EECE 4630	Robotics	
EECE 5550	Mobile Robotics	
EECE 5552	Assistive Robotics	
EECE 5554	Robotics Sensing and Navigation	
EECE 5639	Computer Vision	
EECE 5644	Introduction to Machine Learning and Pattern Recognition	
EECE 5580	Classical Control Systems	
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>)

**Marilyn L. Minus, PhD**  
Professor and Chair

334 Snell Engineering Center  
617.373.2740  
617.373.2921 (fax)

The Department of Mechanical and Industrial Engineering offers comprehensive undergraduate programs in both mechanical

engineering and industrial engineering, equipping students with the fundamentals in science, mathematics, and engineering. The programs are optimally blended with theory, computation, and laboratory-level practice, as well as with real-world experience through cooperative education programs aligned with Northeastern University's mission in experiential learning. Graduates are positioned to excel in careers in broad areas of engineering as well as in academia.

### Mission of the Department

The mission of the Department of Mechanical and Industrial Engineering is to educate students for professional and technical excellence; to perform research to advance the science and practice of engineering; to engage in service activities that advance the department, the university, and the profession; and to instill in ourselves and our students habits and attitudes that promote ethical behavior, professional responsibility, and careers that advance the well-being of society.

### Mechanical Engineering

Mechanical engineers design, develop, and support the manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Traditionally, mechanical engineers have designed and tested devices, such as heating and air-conditioning systems, machine tools, internal-combustion engines, and steam power plants. Today they also play primary roles in the development of new technologies in a variety of fields—energy conversion, solar energy utilization, environmental control, prosthetics, transportation, manufacturing, robotics, and new-materials development.

Mechanical engineers use computers to formulate preliminary and final designs of systems or devices, to perform calculations that predict the behavior of the design, and to collect and analyze performance data from system testing or operation. Mechanical engineering has been heavily influenced by recent advances in computer hardware and software.

The curriculum in mechanical engineering focuses on four areas: applied mechanics, thermofluids engineering, materials science, and mechatronics. Applied mechanics is the study of the motion and deformation of structural elements acted on by forces in devices that range from rotating industrial dynamos to dentists' drills. Thermofluids engineering deals with the motion of fluids and the transfer of energy, as in the cooling of electronic components or the design of gas turbine engines. Materials science is concerned with the relationship between the structure and properties of materials and with the control of structure, through processing, to achieve desired properties. Practical applications are in the development of composite materials, metallurgical process industries, and advanced functional materials. Mechatronics is critical to any engineered system in which sensors and actuators of several types communicate and function.

Courses in each area form the foundation for advanced analytical and creative design courses that culminate in a two-semester capstone design project. Faculty encourage students throughout the curriculum to use computer-aided design tools and high-performance computer workstations.

### Industrial Engineering

Industrial engineers design and analyze systems that include people, equipment, and materials and their interactions and performance in the workplace. An industrial engineer collects this information and evaluates alternatives to make decisions that best advance the goals of the enterprise. Industrial engineers work in manufacturing firms, hospitals, banks, public utilities, transportation, government agencies, insurance companies, and construction firms. Among the projects they undertake

are design and implementation of a computer-integrated supply chain or manufacturing system, facilities planning for a variety of industries, design of a robotics system in a manufacturing environment, long-range corporate planning, development and implementation of a quality-control system, simulation analyses to improve processes and make operational decisions, design of healthcare operations to enhance patient safety and improve efficiency, productivity, and development of computer systems for information control.

The program in industrial engineering offers students a base of traditional engineering courses, such as work design, human-machine systems, probability, statistics, and engineering economy, while emphasizing such contemporary areas as simulation modeling, engineering database systems, quality assurance, logistics and supply chain management, operations research, and facilities planning. Students integrate the knowledge acquired in these courses in a two-semester capstone design project.

### Other Programmatic Features

More than 90 percent of the department's undergraduate students take advantage of the cooperative education program. Cooperative education assignments increase in responsibility and technical challenge as students progress through the program. Entry level co-op positions in **mechanical engineering** may be in manufacturing, quality assurance and testing, or involve 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.

Our students have an opportunity to obtain a broad knowledge base in science, engineering, and general studies that allows them flexibility in career development and graduate education. At the same time, our graduates should be responsible and scientifically educated citizens, prepared to contribute personally as well as professionally to an educated, democratic society.

### Programs

#### Bachelor of Science in Industrial Engineering (BSIE)

- Industrial Engineering (p. 484)

#### Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering (p. 488)
- Mechanical Engineering and Design (p. 123)
- Mechanical Engineering and Physics (p. 495)

### Minors

- Biomechanical Engineering (p. 498)
- Healthcare System Operation (p. 498)s (p. 498)
- Industrial Engineering (p. 498)
- Mechanical Engineering (p. 499)
- Robotics (p. 483)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Industrial Engineering, BSIE

Industrial engineering involves the design and analysis of systems that include people, equipment, and materials and their interactions and performance in the workplace. An industrial engineer collects this information and evaluates alternatives to make decisions that best advance the goals of the enterprise.

The program in industrial engineering offers students a base of traditional engineering courses, such as work design, human-machine systems, probability, statistics, and engineering economy, while emphasizing such contemporary areas as simulation modeling, engineering database systems, quality assurance, logistics and supply chain management, operations research, and facilities planning. Students integrate the knowledge acquired in these courses in a two-semester capstone design project.

Industrial engineers work in manufacturing firms, hospitals, banks, public utilities, transportation, government agencies, insurance companies, and construction firms. Among the projects they undertake are design and implementation of a computer-integrated supply chain or manufacturing system; facilities planning for a variety of industries; design of a robotics system in a manufacturing environment; long-range corporate planning; development and implementation of a quality-control system; simulation analyses to improve processes and make operational decisions; design of healthcare operations to enhance patient safety; and improve efficiency, productivity, and development of computer systems for information control.

More than 90 percent of department undergraduate students take advantage of the cooperative education program. Cooperative education assignments generally increase in level of responsibility as students gain theoretical and technical knowledge through their academic work. A sophomore might begin as a computer/data analyst evaluating the performance of a manufacturing system and progress to designing manufacturing engineering workstations by the senior year.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.



**Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
IE 2310 and IE 2311	Introduction to Industrial Engineering and Recitation for IE 2310	4
IE 3425 and IE 3426	Engineering Database Systems and Recitation for IE 3425	4
IE 4510	Simulation Modeling and Analysis	4
IE 4516	Quality Assurance	4
IE 4522 and IE 4523	Human-Machine Systems and Lab for IE 4522	5
IE 4525	Logistics and Supply Chain Management	4
IE 4530 and IE 4531	Manufacturing Systems and Techniques and Lab for IE 4530	5

**Industrial Engineering Capstone**

MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

**Engineering Electives**

Complete 8 semester hours of technical electives in the following subject areas:	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 or MATH 3081 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	
2 semester hours from the following course count toward the engineering requirement:	2
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	

**Supporting Courses: Mathematics/Science**

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
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**Science Elective**

Complete one of the following:	5	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214 (and Lab for CHEM 1214)	
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement:	3
IE 3412 Engineering Probability and Statistics or MATH 3081 Probability and Statistics	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
IE 4512 Engineering Economy	
2 semester hours from the following course count toward the mathematics/science requirement:	2
IE 4515 Operations Research	
2 semester hours from the following course count toward the mathematics/science requirement:	2
IE 4520 Stochastic Modeling	
1 semester hour from the following course counts toward the mathematics/science requirement:	1
GE 1501 Cornerstone of Engineering 1	

**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:	1
GE 1501 Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development requirement:	1
GE 1502 Cornerstone of Engineering 2	



### Writing Requirements

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 28 SH of academic, nonremedial, nonrepetitive courses.		28

### Program Requirement

137 total semester hours required

### Plan of Study

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

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	General Elective	4	Vacation	0		
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	General Elective	4				
CHEM 1153	0	PHYS 1151 (ND)	3						
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1						
GE 1000	1	PHYS 1153	1						
GE 1501	4	General Elective	4						
MATH 1342 (FQ)	4								
		21			17			8	0
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
IE 2310 (WI)	4	IE 3412 (AD)	4	General Elective	4	Co-op			
IE 2311	0	IE 4512	4	General Elective	4				
IE 3425	4	ENCP 2000	1						
IE 3426	0	General Elective	4						
MATH 2341	4	General Elective	4						
Science Elective	5								
		17			17			8	0

Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op		ENCP 3000	1	MEIE 4701 (EI, WI, CE)	1	Co-op			
ENGW 3302 or 3315 (to be taken online) (WD)	4	IE 4510	4	General Elective	4				
		IE 4515	4	Technical Elective	4				
		IE 4516	4						
		IE 4530	4						
		IE 4531	1						
		4			18			9	0
Year 4									
Fall	Hours	Spring	Hours						
Co-op		IE 4520	4						
		IE 4522 (WI)	4						
		IE 4523	1						
		IE 4525	4						
		MEIE 4702 (EI, WI, CE)	5						
		0			18				

Total Hours: 137

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

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	General Elective	4	Vacation	0		
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	General Elective	4				
CHEM 1153	0	PHYS 1151 (ND)	3						
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1						
GE 1000	1	PHYS 1153	1						
GE 1501	4	General Elective	4						
MATH 1342 (FQ)	4								
		21			17			8	0
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
ENCP 2000	1	Co-op		Co-op		MATH 3081 (AD)	4		
IE 2310 (WI)	4					General Elective	4		
IE 2311	0								

IE 3425	4			
IE 3426	0			
MATH 2341	4			
Science Elective	5			
	18	0	0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op		Co-op		General Elective	4
IE 4510	4	ENGW 3302 or 3315 (to be taken online) (WD)	4			General Elective	4
IE 4515	4						
IE 4516	4						
IE 4530	4						
IE 4531	1						
	18		4		0		8

**Year 4**

Fall	Hours	Spring	Hours
IE 4512	4	IE 4522	4
IE 4520	4	IE 4523	1
IE 4525	4	MEIE 4702 (EI, WI, CE)	5
MEIE 4701 (EI, WI, CE)	1	General Elective	4
Technical Elective	4	Technical Elective	4
	17		18

Total Hours: 137

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IE 2310 (WI)	4	ENCP 2000	1	Vacation	0	Co-op	0
IE 2311	0	IE 3412 (AD)	4				
IE 3425	4	IE 4512	4				
IE 3426	0	MATH 2341	4				
MATH 2321 (FQ)	4	General Elective	4				

Science Elective	5			
	17	17	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3302 or 3315 (to be taken online) (WD)	4	General Elective	4	Co-op	0
		IE 4510	4	General Elective	4		
		IE 4515	4				
		IE 4516	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	MEIE 4701 (EI, CE, WI)	1	Co-op	0
		IE 4520	4	General Elective	4		
		IE 4525	4	General Elective	4		
		IE 4530	4				
		IE 4531	1				
		Technical Elective	4				
	0		18		9		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	IE 4522	4
		IE 4523	1
		MEIE 4702 (EI, WI, CE)	5
		General Elective	4
		Technical Elective	4
	0		18

Total Hours: 137

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 2000	1	Co-op	0	Co-op	0	Vacation	0
IE 2310 (WI)	4						
IE 2311	0						
IE 3425	4						
IE 3426	0						
MATH 2321 (FQ)	4						
Science Elective	5						
	18		0		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3302 or 3315 (to be taken online) (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

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 3000	1	Co-op	0	Co-op	0	General Elective	4
IE 4510	4					General Elective	4
IE 4515	4						
IE 4516	4						
IE 4530	4						
IE 4531	1						
	18		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
IE 4520	4	IE 4522 (WI)	4
IE 4525	4	IE 4523	1
MEIE 4701 (EI, WI, CE)	1	MEIE 4702 (EI, WI, CE)	5
General Elective	4	General Elective	4
Technical Elective	4	Technical Elective	4
	17		18

Total Hours: 137

## Mechanical Engineering, BSME

Mechanical engineering involves the design, development, and manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Its current practice has been heavily influenced by recent advances in computer hardware and software.

Mechanical engineers use computers to formulate preliminary and final designs of systems or devices, to perform calculations that predict the behavior of the design, and to collect and analyze performance data from system testing or operation.

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Courses in each area form the foundation for advanced analytical and creative design courses that culminate in a two-semester capstone design project. Faculty encourages students throughout the curriculum to use computer-aided design tools and high-performance computer workstations.

More than 90 percent of department undergraduate students take advantage of the cooperative education program. Cooperative education assignments increase in responsibility and technical challenge as students progress through the program. Initial positions may involve computer-intensive CAD/CAM assignments or programming tasks, while more advanced jobs will place students in charge of design, quality-control systems, and performance testing of equipment.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	5
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
ME 4508	Mechanical Engineering Computation and Design	4
ME 4550	Mechanical Engineering Design	4
ME 4555	System Analysis and Control	4
ME 4570	Thermal Systems Analysis and Design	4
<b>Mechanical Engineering Capstone</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5
<b>Mechanical and Industrial Engineering Technical Elective</b>		
Complete one technical elective in one of the following subject areas:		4
EMGT, ENGR, IE, ME, or MEIE		
<b>Supplemental Credit</b>		
2 semester hours from the following course counts toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course counts toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	
<b>Supporting Courses: Mathematics/Science</b>		
Complete all Mathematics/Science courses with a minimum of 30 semester hours.		
Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
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**Science/Math Elective**

Complete one of the following:		4-5
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214	
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	
MATH 3081	Probability and Statistics	
PHYS 2303	Modern Physics	
PHYS 3601	Classical Dynamics	
PHYS 3602	Electricity and Magnetism 1	

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1	

**Professional Development**

Code	Title	Hours
<b>Required Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development 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 Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 24 SH of academic, nonremedial, nonrepetitive courses.		24

**Program Requirement**

140 total semester hours required

## Plan of Study

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	ME 2350	4	Vacation	0
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	General Elective	4		
CHEM 1153	0	PHYS 1151 (ND)	3				
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1				
GE 1000	1	PHYS 1153	1				
GE 1501	4	General Elective	4				
MATH 1342 (FQ)	4						
	21		17		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2341	4	ENCP 2000	1	ME 3475	4	Co-op	
ME 2355	4	ME 2340 (WI)	4	General Elective	4		
ME 2356	1	ME 2341	1				
PHYS 1155 (ND)	3	ME 2380	4				
PHYS 1156 (AD)	1	ME 2381	0				
PHYS 1157	1	ME 3455	4				
General Elective	4	ME 3456	1				
		General Elective	4				
	18		19		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		EECE 2210	4	ME 4550	4	Co-op	
ENGW 3302 or 3315 (to be taken online) (WD)	4	EECE 2211	1	MEIE 4701 (EI, WI, CE)	1		
		ENCP 3000	1	General Elective	4		
		ME 4505 (AD)	4				
		ME 4506	1				
		ME 4555	4				
		ME 4570	4				
	4		19		9		0

### Year 4

Fall	Hours	Spring	Hours
Co-op		ME 4508	4
		MEIE 4702 (EI, WI, CE)	5
		MIE Technical Elective	4
		Science/Math Elective	4
	0		17

Total Hours: 140

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	GE 1502 (ER)	4	ME 2350	4	Vacation	0
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	General Elective	4		
CHEM 1153	0	PHYS 1151 (ND)	3				
ENGW 1111 (WF)	4	PHYS 1152 (AD)	1				
GE 1000	1	PHYS 1153	1				
GE 1501	4	General Elective	4				
MATH 1342 (FQ)	4						
	21		17		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2341	4	Co-op		Co-op		ME 3475	4
ME 2355	4					General Elective	4
ME 2356	1						
ME 2380	4						
ME 2381	0						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
	18		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 2000	1	Co-op		Co-op		ME 4550	4

ME 3455	4	ENGW 3302 or 3315 (to be taken online) (WD)	4	MEIE 4701 (EI, WI, CE)	1
ME 3456	1			General Elective	4
ME 4505 (AD)	4				
ME 4506	1				
ME 4570	4				
General Elective	4				
	19		4	0	9

**Year 4**

Fall	Hours	Spring	Hours
EECE 2210	4	ME 2340 (WI)	4
EECE 2211	1	ME 2341	1
ENCP 3000	1	ME 4508	4
ME 4555	4	MIE Technical Elective	4
MEIE 4702 (EI, WI, CE)	5	Science/Math Elective	4
General Elective	4		
	19		17

Total Hours: 140

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17	0		0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321 (FQ)	4	ENCP 2000	1	Vacation	0	Co-op	0
ME 2350	4	MATH 2341	4				
PHYS 1155 (ND)	3	ME 2355	4				
PHYS 1156 (AD)	1	ME 2356	1				
PHYS 1157	1	ME 2380	4				
General Elective	4	ME 2381	0				

General Elective	4			
	17	18	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3302 or 3315 (WD)	4	ME 3475	4	Co-op	0
		ME 2340 (WI)	4	General Elective	4		
		ME 2341	1				
		ME 3455	4				
		ME 3456	1				
		ME 4508	4				
	0		18		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	ME 4550	4	Co-op	0
		ME 4505 (AD)	4	MEIE 4701 (EI, WI, CE)	1		
		ME 4506	1	General Elective	4		
		ME 4555	4				
		ME 4570	4				
		Math/Science Elective	4				
	0		18		9		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	EECE 2210	4
		EECE 2211	1
		MEIE 4702 (EI, WI, CE)	5
		General Elective	4
		MIE Technical Elective	4
	0		18

Total Hours: 140

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17	0		0	0



Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENCP 2000	1	Co-op	0	Co-op	0	Vacation	0
MATH 2321 (FQ)	4						
ME 2350	4						
PHYS 1155 (ND)	3						
PHYS 1156 (AD)	1						
PHYS 1157	1						
General Elective	4						
	18		0		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2341	4	Co-op	0	Co-op	0	ENGW 3302 or 3315 (WD)	4
ME 2340 (WI)	4					ME 3475	4
ME 2341	1						
ME 2355	4						
ME 2356	1						
ME 2380	4						
ME 2381	0						
	18		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ME 3455	4	Co-op	0	Co-op	0	ME 4550	4
ME 3456	1					MEIE 4701 (EI, WI, CE)	1
ME 4505 (AD)	4					General Elective	4
ME 4506	1						
ME 4508	4						
ME 4570	4						
	18		0		0		9
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2210	4	General Elective	4				
EECE 2211	1	General Elective	4				
ENCP 3000	1	Math/ Science Elective	4				
ME 4555	4	MIE Technical Elective	4				
MEIE 4702 (EI, WI, CE)	5						
General Elective	4						
	19		16				

Total Hours: 140

## Mechanical Engineering and Design, BSME

The combined major in mechanical engineering and design is designed to educate students in topics of both disciplines and the interface between them. Mechanical engineering involves the design, development, and manufacture of machinery and devices to transmit power or to convert energy from thermal to mechanical form in order to power the modern world and its machines. Its current practice has been heavily influenced by recent advances in computer hardware and software. Today, engineers also play a primary role in the development of new technologies in a variety of fields—energy conversion, solar energy utilization, environmental control, prosthetics, transportation, manufacturing, and new-materials development. Design is the discipline that shapes human experiences in specific situations to improve quality. Designers pose important questions about—and provide significant answers to how we live. Designers are needed when we don't know what is needed as well as when we think we do. Students in this program will combine the disciplines in order to address complex problems with human-centered solutions.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Engineering Requirements

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5

### Senior Capstone Design Project

MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

### Technical Electives

Complete three of the following:		12
ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	

ME 4555	System Analysis and Control	
ME 4570	Thermal Systems Analysis and Design	
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

### Supporting Courses: Mathematics/Science

Complete all mathematics/science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
<b>Supplemental Credit</b>		
1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1	

### Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000 or ARTF 1000	Introduction to the Study of Engineering Art and Design at Northeastern	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1
<b>Additional Required Courses</b>		
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2	

### Design Requirements

Code	Title	Hours
ARTF 1122	Color and Composition	4
<b>Complete one of the following:</b>		<b>4</b>
ARTF 1121	Conceptual Drawing	

ARTF 1124	Form and Structure	
ARTF 2220	Movement and Time	
ARTF 2223	Experience and Interaction	
<b>Design Requirements</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1	4
Complete one of the following design options:		8
<i>Interactive Design Option</i>		
ARTG 2400	Interaction Design 1: Responsive	
ARTG 3700	Interaction Design 2: Mobile	
<i>Graphic and Information Design Option</i>		
ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	
<i>Experience Design Option</i>		
ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	
<b>Art + Design Electives</b>		
<i>Art + Design History Elective</i>		4
Complete any ARTH course. Recommend selecting an ARTH course that fulfills both NUpath IC and SI.		
<i>Design Elective</i>		8
Complete two ARTG courses (at least one at 3xxx-level or higher).		
<i>Art + Design Elective</i>		4
Complete any one ARTG, ARTE, ARTD, ARTH, ARTS course.		

### Writing Requirements

Code	Title	Hours
A grade of C or higher is required in each course:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 4 semester hours of academic, nonremedial, nonrepetitive courses. Recommend selecting a course to fulfill NUpath DD.		4

### Integrative Courses

Code	Title	Hours
This course is already required above and also fulfills the integrative requirement.		
MEIE 4702	Capstone Design 2	

### Program Requirement

143 total semester hours required

### Plan of Study

#### Sample 4 Years, Two Co-ops Curriculum Outline (Co-op in Summer 2/Fall)

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have AP credit for Calc.AB (MATH 1341, Calculus 1)	4	MATH 2321	4	ME 2350	4	Vacation	0
MATH 1342	4	PHYS 1151 and PHYS 1152 and PHYS 1153	5	Art + Design fundamental	4		
CHEM 1151 and CHEM 1153	4	GE 1502	4				
ARTF 1000 or GE 1000	1	ARTF 1122	4				
GE 1501	4						
ENGW 1111	4						
	21		17		8		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2341	4	ME 2355 and ME 2356	5	ME 3475 or 3480	4	Co-op	0
PHYS 1155 and PHYS 1156 and PHYS 1157	5	ME 2380 and ME 2381	4	ARTG 2250	4		
ME 2340 and ME 2341	5	ME 3455 and ME 3456	5				
ARTG 1250	4	ENCP 2000 Design option 1	4				
	18		19		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ME 4505 and ME 4506	5	MEIE 4701	1	Co-op	0
ENGW 3302 or 3315 (to be taken online)	4	Engineering tech elective 1	4	Engineering tech elective 2	4		
		Design option 2	4	Art + Design elective	4		
		Art + Design history elective	4				
		ENCP 3000	1				
	4		18		9		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MEIE 4702	5				

General elective (NUpath DD)	4	Engineering tech elective 3	4
		Design elective 1	4
		Design elective 2	4
	4		17

Total Hours: 143

#### Sample Five Years, Three Co-ops Curriculum Outline (Co-op in Summer 2/Fall)

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have AP credit for Calc.AB (MATH 1341, Calculus 1)	4	MATH 2321	4	Vacation	0	Vacation	0
MATH 1342	4	PHYS 1151 and PHYS 1152 and PHYS 1153	5				
CHEM 1151 and CHEM 1153	4	GE 1502	4				
ARTF 1000 or GE 1000	1	ARTF 1122	4				
GE 1501	4						
ENGW 1111	4						
	21		17		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1155 and PHYS 1156 and PHYS 1157	5	ENCP 2000	1	Vacation	0	Co-op	0
ME 2350	4	MATH 2341	4				
ARTG 1250	4	ME 2340 and ME 2341	5				
General elective (NUpath DD)	4	ME 2380 and ME 2381	4				
		Art + Design fundamental	4				
	17		18		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ME 2355 and ME 2356	5	ME 3475 or 3480	4	Co-op	0
		ME 3455 and ME 3456	5	ARTG 2250	4		
		ENGW 3302 or 3315	4				
		Design option 1	4				

		ENCP 3000	1				
	0		19		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	ME 4505 and ME 4506	5	MEIE 4701	1	Co-op	0
		Engineering tech elective 1	4	Engineering tech elective 2	4		
		Design option 2	4	Art + Design elective	4		
		Art + Design history elective	4				
	0		17		9		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op	0	MEIE 4702	5				
		Engineering tech elective 3	4				
		Design elective 1	4				
		Design elective 2	4				
	0		17				

Total Hours: 143

## 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
ME 4508	Mechanical Engineering Computation and Design	4
ME 4550	Mechanical Engineering Design	4
ME 4555	System Analysis and Control	4
ME 4570	Thermal Systems Analysis and Design	4
<b>Mechanical Engineering Capstone</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5
<b>Supplemental Credit</b>		
	2 semester hours from the following course counts toward the engineering requirement:	2
GE 1501	Cornerstone of Engineering 1	
	3 semester hours from the following course counts toward the engineering requirement:	3
GE 1502	Cornerstone of Engineering 2	
<b>Mathematics/Science Requirement</b>		
Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 5318	Principles of Experimental Physics	4

**Advanced Physics Elective**

Complete one 4 semester hour course from the below list:		4
PHYS 4606	Mathematical and Computational Methods for Physics	
PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	
PHYS 5111	Astrophysics and Cosmology	
PHYS 5113	Introduction to Particle and Nuclear Physics	
PHYS 5114	Physics of Advanced Materials	
PHYS 5116	Complex Networks and Applications	
PHYS 5260	Introduction to Nanoscience and Nanotechnology	

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1	

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2	

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8SH of academic, nonremedial, nonrepetitive courses.		8

**Integrative Requirement**

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

**Major GPA Requirement**

2.000 minimum GPA required in IE, ME, and MEIE courses

**Program Requirement**

139 total semester hours required

**Plan of Study**

**FOUR YEARS, ONE CO-OP IN SUMMER 2 / FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	ENGW 1111 (WF)	4	Vacation	0	Vacation	0
CHEM 1151 (ND)	4	GE 1502 (ER)	4				
CHEM 1153	0	MATH 2321 (FQ)	4				
GE 1000	1	PHYS 1165 (ND)	4				
GE 1501	4	PHYS 1166 (AD)	1				
MATH 1342 (FQ)	4	PHYS 1167	0				
PHYS 1161 (ND)	4						
PHYS 1162 (AD)	1						
		22	17	0	0		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2341	4	ME 2340 (WI)	4	ME 3475	4	Vacation	
ME 2350	4	ME 2341	1	PHYS 3600 (ND, AD, WI)	4		
ME 2380	4	ME 2355	4				
ME 2381	0	ME 2356	1				
PHYS 2303 (ND)	4	PHYS 3601 (ND)	4				
		General Elective	4				
		16	18	8	0		

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3302 or 3315 (WD)	4	ENCP 2000	1	ME 4550	4	Co-op	0
ME 4505 (AD)	4	ME 3455	4	MEIE 4701 (EI, CE, WI)	1		
ME 4506	1	ME 3456	1				
PHYS 2371 (ND)	3	ME 4508	4				
PHYS 2372 (EI)	1	ME 4570	4				

General Elective	4	PHYS 3602 (ND)	4		
	17		18	5	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1				
		ME 4555	4				
		MEIE 4702 (EI, CE, WI)	5				
		PHYS 5318 (ND, AD, WI, CE)	4				
		Advanced Physics Elective	4				
	0		18				

Total Hours: 139

**FIVE YEARS, THREE CO-OPS IN SUMMER 2 / FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ENGW 1111 (WF)	4	Vacation	0	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4				
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 (AD)	1				
PHYS 1161 (ND)	4						
PHYS 1162 (AD)	1						
	18		17	0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321 (FQ)	4	ENCP 2000	1	Vacation	0	Co-op	0
MATH 2341	4	ME 2340 (WI)	4				
ME 2350	4	ME 2341	1				
PHYS 2371 (ND)	3	ME 2355	4				
PHYS 2372 (EI)	1	ME 2356	1				
		ME 2380	4				
		ME 2381	0				
		PHYS 2303 (ND)	4				
	16		19	0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3302 or 3315 (WD)	4	ME 3475	4	Co-op	0
		ME 3455	4	PHYS 3600 (ND, AD, WI)	4		

		ME 3456	1				
		ME 4508	4				
		PHYS 3602 (ND)	4				
	0		17			8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	ME 4550	4	Co-op	0
		ME 4505 (AD)	4	MEIE 4701 (EI, WI, CE)	1		
		ME 4506	1	General Elective	4		
		ME 4555	4				
		ME 4570	4				
		PHYS 3601 (ND)	4				
	0		18			9	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	MEIE 4702 (EI, WI, CE)	5
		PHYS 5318 (ND, AD, CE, WI)	4
		Advanced Physics Elective	4
		General Elective	4
	0		17

Total Hours: 139

**Notes:**

- PHYS 2303 offered every fall, spring and summer 2.
- PHYS 2371/2372 offered every fall.
- PHYS 3600 offered every summer 1 and summer 2.
- Classical Dynamics (PHYS 3601) is offered fall and spring semesters of even years only. Please meet with an academic advisor to discuss scheduling options for Year 4 of odd years.
- PHYS 3602 offered every fall and spring.
- PHYS 3603 offered fall (even years) and summer 1 (odd years).
- PHYS 4115 offered every fall and spring.
- PHYS 4305 offered every spring and summer 2 (even years).
- PHYS 4621 offered spring (odd years) and fall (even years).
- PHYS 4623 offered summer 1 and fall (even years).
- PHYS 4651 offered spring and fall (odd years).
- PHYS 4652 offered every spring.
- PHYS 5318 offered every spring.
- Advanced physics electives: **PHYS 4606, PHYS 4621, PHYS 4623, PHYS 4651, PHYS 4652, PHYS 5111, PHYS 5113, PHYS 5114, PHYS 5116, PHYS 5260.**



## Biomechanical Engineering, Minor

This minor provides an opportunity for students to explore the interaction between mechanical engineering and health. Recommended for students interested in aspects of engineering related to human kinematics, including biomedical devices, joint injury, prosthetic development, human-machine systems, and/or prosthetics.

### Minor Requirements

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

### Required Biology

Code	Title	Hours
<b>Biology 1</b>		
Complete one of the following:		5
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	

### Anatomy and Physiology

Code	Title	Hours
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5

### Required Mechanical Engineering

Code	Title	Hours
ME 5665	Musculoskeletal Biomechanics	4
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5

### Technical Elective

Additional electives may be approved by your academic adviser.

Code	Title	Hours
Complete one of the following:		4-5
IE 4520	Stochastic Modeling	
IE 4522 and IE 4523	Human-Machine Systems and Lab for IE 4522	
ME 4640	Mechanical Behavior and Processing of Materials	
ME 5650	Advanced Mechanics of Materials	
ME 5655	Dynamics and Mechanical Vibration	
PHYS 4621	Biological Physics 1	

### GPA Requirement

2.000 GPA required in the minor

## Healthcare System Operations, Minor

The objective of the minor in healthcare system operations is to prepare students to apply industrial and systems engineering methods in healthcare applications. Distinct from other service industries, healthcare systems are characterized by extensive complexities driven by communication between and interdependencies among multiple actors, and the need to simultaneously address multiple competing objectives pertaining to economic, quality-driven, individual-driven, and population-driven goals. This minor will benefit students by highlighting the unique features of this industry and methods for addressing its

unique challenges to engineer improvements to the design, operation, and management of healthcare systems.

### Minor Requirements

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

### Required Courses

At most, one course from the minor may be counted toward major requirements.

Code	Title	Hours
<b>Required Courses</b>		
IE 5617	Lean Concepts and Applications	4
IE 5400	Healthcare Systems Modeling and Analysis	4
or IE 3500	Introduction to Healthcare Systems Engineering	
PHTH 1260	The American Healthcare System	4
<b>Electives</b>		
Complete one of the following:		4
IE 5374	Special Topics in Industrial Engineering (System Dynamics in Healthcare)	
IE 5500	Systems Engineering in Public Programs	
IE 5640	Data Mining for Engineering Applications	
NRSG 5121	Epidemiology and Population Health	
PHTH 4511	Healthcare Management	
PHTH 5226	Strategic Management and Leadership in Healthcare	
PHTH 5232	Evaluating Healthcare Quality	
SCHM 3315	Managing Healthcare Operations and Supply Chain	

### GPA Requirement

2.000 GPA required in the minor

## Industrial Engineering, Minor

This minor provides an opportunity for students to explore core aspects of industrial engineering, including mathematical foundations, along with a technical focus into one of the many industrial engineering subdisciplines.

### Minor Requirements

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

### Required Courses

Code	Title	Hours
IE 2310	Introduction to Industrial Engineering	4
IE 4515	Operations Research	4
IE 3412	Engineering Probability and Statistics (or equivalent)	4

## Technical Elective

Consult mechanical and industrial engineering academic advisor for additional electives.

Code	Title	Hours
Complete one of the following:		
IE 3425	Engineering Database Systems	4
IE 4510	Simulation Modeling and Analysis	
IE 4512	Engineering Economy	
IE 4516	Quality Assurance	
IE 4520	Stochastic Modeling	
IE 4522 and IE 4523	Human-Machine Systems and Lab for IE 4522	
IE 4525	Logistics and Supply Chain Management	
IE 4530	Manufacturing Systems and Techniques	

## GPA Requirement

2.000 GPA required in the minor

## Mechanical Engineering, Minor

This minor provides an opportunity for students to explore core aspects of mechanical engineering, including mechanical and thermal foundations, along with a technical focus into one of the mechanical engineering disciplines (mechanics, thermofluids, materials, and/or controls).

## Minor Requirements

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

## Required Courses

Code	Title	Hours
ME 2350	Statics	4
ME 2380	Thermodynamics	4

## Mechanical Engineering Technical Electives

Code	Title	Hours
Complete two of the following:		
ME 2340	Introduction to Material Science	8
ME 2355	Mechanics of Materials	
ME 3455	Dynamics	
ME 3475	Fluid Mechanics	
or ME 3480	International Applications of Fluid Mechanics	
ME 4508	Mechanical Engineering Computation and Design	
ME 4550	Mechanical Engineering Design	
ME 4555	System Analysis and Control	
ME 4570	Thermal Systems Analysis and Design	

## GPA Requirement

2.000 GPA required in the minor

## Robotics, Minor

The minor in robotics is open to all students in the university. The minor is designed for the student who would like a coherent background in the theory and practice of robotics.

## Program Requirements

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

Students need to complete the program requirements with at least three courses that are not part of their major required course work.

## Required Courses

Code	Title	Hours
ME 3460	Robot Dynamics and Control	4
Complete one of the following:		
EECE 2210 and EECE 2211	Electrical Engineering and Lab for EECE 2210	4
EECE 2160	Embedded Design: Enabling Robotics	

## Electives

Code	Title	Hours
Complete three of the following:		
EECE 4626	Image Processing and Pattern Recognition	12
EECE 4630	Robotics	
EECE 5550	Mobile Robotics	
EECE 5552	Assistive Robotics	
EECE 5554	Robotics Sensing and Navigation	
EECE 5639	Computer Vision	
EECE 5644	Introduction to Machine Learning and Pattern Recognition	
EECE 5580	Classical Control Systems	
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

## Accelerated Bachelor/Graduate Degree Programs

The College of Engineering offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

## Bouvé College of Health Sciences

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

**Carmen C. Sceppa, MD, PhD, Dean**

215 Behrakis Health Sciences Center  
617.373.3323  
617.373.3030 (fax)  
Bouve\_College\_of\_Health\_Sciences@northeastern.edu

**Jennifer Kirwin, PharmD, BCPS, Associate Dean for Academic Affairs**  
Clinical Professor – Department of Pharmacy and Health Systems  
Sciences, School of Pharmacy

120 Behrakis Health Sciences Center  
617.373.2583  
617.373.4701 (fax)

Undergraduate Office of Student Services  
120 Behrakis Health Sciences Center  
617.373.3320  
617.373.8994 (fax)  
bouvestudentservices@northeastern.edu

The Bouvé College of Health Sciences strongly supports the mission of Northeastern University as a practice-oriented, student-centered, experiential research institution. The college is committed to the goals of the university, which include excellence in education, research, scholarship, clinical practice, experiential learning, access to educational opportunities, and a strong professional orientation.

Bouvé offers students an education in health, health profession fields, and public health that features a curriculum of highly relevant, closely integrated, basic and applied courses in the physical, biological, behavioral, social, environmental, and health systems sciences. Students engage in interprofessional patient care, interdisciplinary translational research, and experiential learning opportunities through the university's signature cooperative education program, as well as through service-learning, research, and global experiences.

Bouvé leverages interdisciplinary and interprofessional collaboration to tackle the world's most pressing health challenges. The college seeks to prepare students to become clinicians, researchers, and leaders in healthcare and in the promotion of health of individuals and populations.

Students are provided a broad range of services and programs to ensure their academic success and enhance their overall educational experience at Northeastern University, from their first year through graduation. Faculty are deeply committed to student success, as students interact with world-class healthcare and educational institutions nationally and globally, to advance health for all.

### Academic Requirements

Students are responsible for following the program requirements for their respective major, pattern of attendance, and graduation year. Students are responsible for monitoring their own progress through the curriculum by registering for the courses stipulated by their curriculum plan, abiding by course prerequisites, regularly checking their degree audits, and knowing the consequences for unsatisfactory academic progress. Any exceptions to a student's curriculum plan will be determined by protocols established by the program, after consultation with the student's academic adviser.

The minimum passing grade for a course within a curriculum is stipulated in the program requirements published in this catalog. The minimum passing grades required for certain NUPath writing-intensive courses is established by the university and can be viewed at this section of the catalog (<http://catalog.northeastern.edu/undergraduate/university-academics/nupath/writing-intensive/>). For a course where the minimum passing grade is not established in the program requirements published in this catalog, the university's minimum passing grade for the course will be accepted.

### PROGRESSION WITHIN BOUVÉ

- First-year students must complete the minimum semester hours outlined by the university Academic Progression Standards (<http://catalog.northeastern.edu/undergraduate/academic-policies-procedures/progression-standards/>) and meet all major/program prerequisite course requirements to progress to sophomore status.
- Students who incur an incomplete grade in a prerequisite course may not progress into the subsequent courses(s). Any exceptions will be determined by protocols established by the program, after consultation with the student's academic adviser. See *Clearing an Incomplete or Changing Other Grades* section on the (<http://catalog.northeastern.edu/undergraduate/academic-policies-procedures/student-records-transcripts-related-policies/>) Student Records, Transcripts, and Related Policies page of this catalog for more detail.
- Please see each program's requirements page in this catalog for progression requirements specific to that program.

### ACADEMIC DISMISSAL FROM MAJOR

Students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for failure to earn the minimum required grade in the same course twice. Additional grounds for academic dismissal specific to each major can be found on the program requirements page of the major in this catalog.

*Note:* Students dismissed from their major 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 APPEALS

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Additional details about the process may be found in the Bouvé College Academic Affairs Appeals Policy and in *Appeals Policies and Procedures* in the university Undergraduate Student Handbook. The Bouvé College Academic Affairs Appeals Policy linked above applies to both undergraduate and graduate students in the college.

### GRADE-POINT AVERAGE (GPA)

Bouvé College does not permit the use of a hand-calculated GPA under any circumstances. All GPA calculations will be performed by the university's standard process.

### OTHER POLICIES AND PROCEDURES

In addition to policies and procedures referenced here, the following policies and procedures published in Bouvé's graduate catalog also apply to Bouvé's undergraduate students unless specifically indicated otherwise in this section of the catalog:

- Health Certification (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/health-certification/>)
- Requirements for Clinical, Internships, and Practicum Courses (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>)
- Background Checks (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/background-checks/>)
- Liability Insurance (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/liability-insurance/>)
- Academic Affairs Appeals Process (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/appeals-process/>)

## Interdisciplinary

### Minors

- Health, Humanities, and Society (p. 502)
- Healthcare System Operations (p. 498)

### Combined Majors

- Communication Studies and Speech Language Pathology and Audiology (p. 176)
- Data Science and Health Science (p. 400)
- Environmental Engineering and Health Science (p. 450)
- Health Science and Business Administration (p. 280)
- Health Science and Communication Studies (p. 177)
- Health Science and Psychology (p. 530)
- Health Science and Sociology (p. 508)
- Linguistics and Speech Language Pathology and Audiology (p. 516)

## Exercise Science, Minor

The minor in exercise science is for undergraduate students from any discipline wishing to expand their understanding in this area. Exercise science is a discipline that examines the short- and long-term responses to exercise and benefits of exercise training for healthy persons, as well as persons with chronic diseases such as heart disease, pulmonary diseases, diabetes, and obesity. Through this minor, undergraduate students have an opportunity to broaden their understanding of exercise and physical activity in health promotion, disease prevention, and interventions. Students who elect a minor in exercise science may then apply to the Master of Science in Exercise Science upon graduation.

### Minor Requirements

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

### Exercise Science Requirements

A minimum grade of C is required in all courses taken toward the minor.

### Required Courses

Code	Title	Hours
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
EXSC 4500 and EXSC 4501	Exercise Physiology 1 and Lab for EXSC 4500	5

EXSC 5200	Cardiopulmonary Physiology	3
EXSC 5220	Advanced Exercise Physiology	3

### GPA Requirement

2.000 GPA required in the minor

## Global Health, Minor

The area of global health has become a critical field of study across and within diverse disciplines, because of the cross-border and cross-national implications of health-related risks for national security, commerce, transportation, and healthcare delivery itself. In collaboration with the College of Social Sciences and Humanities, the minor in global health is designed to provide undergraduate students an opportunity to explore and discuss the implications with an interdisciplinary lens. The minor is comprised of five courses: 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:		4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	
AFRS 1270 or PHTH 1270	Introduction to Global Health Introduction to Global Health	

### Core Courses

Code	Title	Hours
Complete one of the following. If additional courses are taken, they may be used as electives.		
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	4
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5202	Introduction to Epidemiology	
PHTH 5230	Global Health	

### Elective Courses

Code	Title	Hours
Complete three courses from the following areas. Only two courses from any one area may count toward the minor electives. No more than two required courses in the student's major may count toward the minor electives. At least one of the minor electives must be at the 3000-level or above.		
<b>Area 1: Community and Public Health</b>		
AFRS 4939	Community Health, Culture, and Development in Kenya (Dialogue Only)	12
PHTH 1261	Comparative Healthcare Systems (Dialogue only)	

PHTH 2301 Communication Skills for the Health Professions—Global <sup>(Dialogue Only)</sup>

PHTH 4540 Health Education and Program Planning

#### Area 2: Biology of Health and Disease

BIOL 1141 Microbes and Society

ENVR 1110 Global Climate Change

#### Area 3: Society and Cultural Health / Area Studies

ANTH 4510 Anthropology of Africa

ANTH 4515 Culture and Politics in Modern India

ECON 1230 Healthcare and Medical Economics

LACS 1220 Latino, Latin American, and Caribbean Studies

PHIL 1165 Moral and Social Problems in Healthcare

#### Area 4: Globalization and Development

CRIM 1400 Human Trafficking

ECON 1291 Development Economics

HLTH 1510 Introduction to Healthcare Ethics

LPSC 2302 Global Human Rights: A Social and Economic Perspective

POLS 1160 International Relations

### Global Health Experience

Complete a global health experience that has been approved by the global health minor adviser.

### Recommended

Competency in another language other than English is recommended.

### 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
<b>Introductory Course</b>		
INSH 1300	Introduction to Health and Humanities	4
<b>Humanities Requirement</b>		
Complete two of the following:		8
ENGL 2770	Writing to Heal	
ENGL 3700	Narrative Medicine	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 4710	Capstone Seminar	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1295	Religious Perspectives on Health and Healing	
WMNS 1225	Gender, Race, and Medicine	
<b>Social Sciences Requirement</b>		
Complete two of the following:		8
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4580	Special Topics in Anthropology	
ECON 1230	Healthcare and Medical Economics	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
PHTH/SOCL 1120	Society and Health	
PHTH 1270	Introduction to Global Health	
PHTH 2300	Communication Skills for the Health Professions	
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5202	Introduction to Epidemiology	
PHTH 5234	Economic Perspectives on Health Policy	
SOCL 1295	Drugs and Society	
SOCL 2303	Gender and Reproductive Justice	
SOCL 3441	Sociology of Health and Illness	



## GPA Requirement

2.000 GPA required in the minor

### Health Psychology, Minor

The objective of the minor in health psychology is to provide students with knowledge regarding the relationship between psychological and behavioral processes and health and illness. Distinct from other specialty areas in psychology, health psychology focuses on how biology, psychology, behavior, and social factors influence health and illness.

This minor seeks to benefit students by highlighting the unique features of this specialty area and help students understand how to apply this knowledge to the provision of health services and various career paths relevant to health psychology, should they choose to pursue careers in professional psychology focused on the promotion of health. The minor in health psychology is designed for undergraduate students from a variety of disciplines within Bouvé and across the university who wish to expand and to apply their understanding in key concepts of behavioral science and how they inform and intersect with public health, prevention science, clinical applications, and interdisciplinary and interprofessional care.

The minor is comprised of five courses. It requires two foundational courses, one that provides an introduction to the role of psychology in health, illness, and healthcare—Health Psychology: An Introduction to Concepts, Theories, and Research (CAEP 2012)—and one that focuses on the application of principles of behavior analysis to address common health problems, such as obesity, addiction, and adherence to medical procedures—Behavioral Assessment and Treatment of Health Problems in the 21st Century (CAEP 2101).

These courses instruct students on basic, foundational principles of mental/behavioral health and the role of psychology in overall health and well-being in applied settings. Students may choose three other electives based on their specific interests.

### Minor Requirements

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

### Required Courses

Code	Title	Hours
CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	4
CAEP 2101	Behavioral Assessment and Treatment of Health Problems in the 21st Century	4

### Elective Courses

Code	Title	Hours
Complete any three of the following:		12
CAEP 2105	College Student Mental Health	
CAEP 2106	History and Systems of Psychology	
CAEP 2107	Introduction to School Psychology	
CAEP 2899	Introduction to College Student Development and Student Affairs	
CAEP 3899	Relationships in College	
CAEP 4525	Introduction to Professional Psychology	
CAEP 5150	Early Intervention: Family Systems	

CAEP 5151	Early Intervention: Infant and Toddler Development, Risk, and Disability
HLTH 5002	Mindfulness: Theory and Practice
HUSV 2800	Sexual Orientation and Gender Expression
HUSV 3520	Child Intervention and Treatment
PSYC 1101	Foundations of Psychology
PSYC 3404	Developmental Psychology

## GPA Requirement

2.000 GPA required in the minor

### Health Research Methods, Minor

The health research methods minor is for undergraduate students from any major in any college at the university who have an interest in developing health-research-related skills. This minor creates an opportunity for students to develop marketable, applied skills and seeks to benefit students pursuing positions within research groups, as well as students pursuing advanced degrees.

**Admissions requirements:** Approval of the student's unit or college advisor and approval of the health research methods minor advisor are required for admission into the minor. Applicants are required to have an overall grade-point average of 3.000 or higher.

**Completion of minor:** Students must successfully complete the four required courses (12–14 credit hours) and human research ethics training, as well as a combination of electives totaling 6–8 credit hours, with a grade of C or better. Courses may not be taken pass/fail for fulfillment of the minor. Up to 8 credits of completed course work from the student's major program of study may be applied to fulfillment of requirements of 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
PHTH 2210	Foundations of Biostatistics	3-4
or NRSB 5120	Statistics for Health Science	
PHTH 3210	Using Data in Health Research	2
PHTH 3250	Fundamentals of Qualitative Research	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	3-4
or PHMD 3450	Research Methodology and Biostatistics	
or HLTH 5450	Healthcare Research	
PHTH 2949	Research Ethics Training	0

### Elective Courses

Code	Title	Hours
Complete 6–8 credits from the following:		
ANTH 3410	Ethnographic Field Experience	4
ECON 2560	Applied Econometrics	4
HLTH 3001	The Research Process	2
HLTH 4992	Directed Study	1-4
or HLTH 4991	Research	



IS 4800	Empirical Research Methods	4
PHMD 5223	Evidence-Based Medicine	2
PHSC 2400	Research Ethics for Beginning Health Scientists	4
PHTH 5320	Grant Writing in Public Health	1
PHTH 5330	Using Publicly Available Data in Public Health	1
PHTH 5340	Writing for Peer-Reviewed Journals in Public Health	1
PHTH 5440	Community-Based Participatory Research: Environmental Health	3
PHTH 5350	Using SAS in Public Health Research	1

### Healthcare System Operations, Minor

The objective of the minor in healthcare system operations is to prepare students to apply industrial and systems engineering methods in healthcare applications. Distinct from other service industries, healthcare systems are characterized by extensive complexities driven by communication between and interdependencies among multiple actors, and the need to simultaneously address multiple competing objectives pertaining to economic, quality-driven, individual-driven, and population-driven goals. This minor will benefit students by highlighting the unique features of this industry and methods for addressing its unique challenges to engineer improvements to the design, operation, and management of healthcare systems.

### Minor Requirements

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

### Required Courses

At most, one course from the minor may be counted toward major requirements.

Code	Title	Hours
<b>Required Courses</b>		
IE 5617	Lean Concepts and Applications	4
IE 5400	Healthcare Systems Modeling and Analysis	4
or IE 3500	Introduction to Healthcare Systems Engineering	
PHTH 1260	The American Healthcare System	4
<b>Electives</b>		
Complete one of the following: 4		
IE 5374	Special Topics in Industrial Engineering (System Dynamics in Healthcare)	
IE 5500	Systems Engineering in Public Programs	
IE 5640	Data Mining for Engineering Applications	
NRSG 5121	Epidemiology and Population Health	
PHTH 4511	Healthcare Management	
PHTH 5226	Strategic Management and Leadership in Healthcare	
PHTH 5232	Evaluating Healthcare Quality	
SCHM 3315	Managing Healthcare Operations and Supply Chain	

### GPA Requirement

2.000 GPA required in the minor

### 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) or Nutrition Service Learning (HSCI 1107) 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
or HSCI 1107	Nutrition Service Learning	
HSCI 2350	Advanced Nutrition in Health and Disease	4
HSCI 2500	Public Health Nutrition in the Community	4

### Supporting Courses

Code	Title	Hours
Complete two of the following. At least one elective must be at the 3000 level or above: 7-8		
BIOL 3611	Biochemistry	
or PHSC 2320	Biochemistry	
CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	
CAEP 3480	Counseling Theories and Practice	
COMM 3201	Health Communication	
ECON 3404	International Food Policy	
EXSC 1120	Introduction to Exercise, Fitness, and Health	
HSCI 1106	Contemporary Issues in Nutrition	
PHSC 4340	Pharmacology for the Health Professions	
PHSC 4502	Pharmacology/Medicinal Chemistry 2	
PPUA 5270	Food Systems and Public Policy	
PSYC 2306	Food, Behavior, and Eating Disorders	

### GPA Requirement

2.000 GPA required in the minor

## Data Science and Health Science, BS

The health science and computer science combined major offers a solid academic and experiential foundation integrating studies in health administration, computer science, mathematics, and statistics. This program reflects the impact of data in modern healthcare and prepares students for success in careers in health administration, community-based health promotion, public health, and big data analysis.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Foundation</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3500	Object-Oriented Design	4
CS 3200	Database Design	4
<b>Information Science Requirement</b>		
IS 4300	Human Computer Interaction	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Supporting Courses for Data Science

Code	Title	Hours
MATH 1341 or MATH 1241	Calculus 1 for Science and Engineering Calculus 1	4

### Data Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

### Supporting Courses for Health Science

Code	Title	Hours
<b>Research Methods</b>		
Complete one of the following:		4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	
IS 4800	Empirical Research Methods	
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
PSYC 2320	Statistics in Psychological Research	
ECON 2350	Statistics	
ENVR 2500	Biostatistics	
MATH 3081	Probability and Statistics	
<b>Philosophy</b>		
Complete one of the following:		4
PHIL 1145	Technology and Human Values	
PHIL 1165	Moral and Social Problems in Healthcare	
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
PSYC 1101	Foundations of Psychology	4

### Integrative Requirement

Code	Title	Hours
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#### Upper-Division Elective

Complete four credits from the following: 4

CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
PHTH 4000 or higher		
HSCI 4000 or higher		

#### Integrative Course

DS 4900	Data Science Senior Project	4
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### Required General Electives

Code	Title	Hours
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Complete 16 credits general electives. 16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Program Requirement

136 semester hours required

### Plan of Study

#### Five Year, Two Co-op Sample Plan of Study

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 2500 and CS 2501	5	BIOL 1113 and BIOL 1114	5				
CS 1800 and CS 1802	5	PSYC 1101	4				
BIOL 1111 and BIOL 1112	5	MATH 1341	4				
ENGW 1111	4						
	20		18		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 1260	4	CS 1210	1	Vacation		Co-op	
PHTH 2300	4	PHTH 2515	4				
CS 3500	4	DS 3000	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5	CS 3200	4				

General Elective	4			
	17	17	0	0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		IS 4300	4	Vacation		Co-op	
		DS 4200	4				
		PHTH 2350	4				
		Statistics Course	4				
	0		16		0		0

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Upper Division Elective	4	Vacation		Vacation	
		DS 4300	4				
		ENGW 3302	4				
		General Elective	4				
	0		16		0		0

##### Year 5

Fall	Hours	Spring	Hours
PHTH 4540	4	DS 4900	4
HLTH 5450, PHTH 4202, or IS 4800	4	DS 4400	4
PHIL 1145 or 1165	4	PHTH 4120	4
General Elective	4	General Elective	4
	16		16

Total Hours: 136

## 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	4
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Business Administration Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
<b>Business Electives</b>		
Complete two of the following:		8
MISM 2301	Management Information Systems	
MKTG 2201	Introduction to Marketing	
SCHM 2301	Supply Chain and Operations Management	
ORGB 3201	Organizational Behavior	
<b>Supporting Courses for Business</b>		
Complete one of the following:		4
ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	

## Business Concentration

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. )

- Accounting (p. )
- Corporate Innovation and Venture
- Entrepreneurial Startups
- Entrepreneurship and New Venture Management (p. )
- Family Business
- Finance (p. )
- Fintech
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. )
- Management Information Systems (p. )
- Marketing (p. )
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship
- Supply Chain Management (p. )

## Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
HSCI 1000 or BUSN 1102	College: An Introduction Personal Skill Development for Business	1
<b>Calculus</b>		
MATH 1231 or MATH 1241	Calculus for Business and Economics Calculus 1	4
<b>Statistics</b>		
PHTH 2210 or MGSC 2301	Foundations of Biostatistics Business Statistics	4
<b>Co-op Preparation</b>		
Complete one of the following:		1
BUSN 1103	Professional Development for Business Co-op	
HSCI 2000	Professional Development for Bouvé Co-op	
<b>Writing</b>		
ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions	4
or ENGW 3304	Advanced Writing in the Business Administration Professions	
<b>Capstone</b>		
Complete one of the following:		4
STRT 4501	Strategy in Action	
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	

### Integrative Requirement

Code	Title	Hours
MGMT 3340	Healthcare Management, Innovation, and Design	4

### Required General Electives

Code	Title	Hours
	Complete at least 16 credits of general electives	16

### Business GPA Requirement

A minimum 2.000 GPA is required in all business courses.

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Plan of Study

Year 1					
Fall	Hours	Spring	Hours		
HSCI 1000 or BUSN 1102	1	BIOL 1113 and BIOL 1114	5		
PHTH 1260	4	ENGW 1111	4		
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5		
BIOL 1111 and BIOL 1112	5	Elective	4		
MATH 1241 or 1231	4				
	18		18		
Year 2					
Fall	Hours	Spring	Hours	Summer 2	Hours
PHTH 2210 or MGSC 2301	4	HSCI 2000 or BUSN 1103	1	Co-op	
PHTH 2350	4	PHTH 2300	4		
ECON 1115 or 1116	4	PHTH 2515	4		
ACCT 1201	4	FINA 2201	4		
		INTB 1203	4		
	16		17		0
Year 3					
Fall	Hours	Spring	Hours		
Co-op		HLTH 5450 or PHTH 4202	4		
		Elective or Concentrator Course	4		
		ACCT 2301	4		

Business Core Selective #1		4			
	0	16			
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 3306 or 3304	4	Co-op		Co-op	
PHTH 4540	4				
MGMT 3340	4				
Business Core Selective #2	4				
	16		0		0
Year 5					
Fall	Hours	Spring	Hours		
PHTH 4120	4	HSCI 4720, 4730, or STRT 4501	4		
HSCI 4700	0	Electives or Concentrator Courses	12		
Electives or Concentration Courses	12				
	16		16		

Total Hours: 133

## Health Science and Sociology, BS

The combined Bachelor of Science in Health Science and Sociology integrates social scientific perspectives to the study of health, illness, and healthcare. Students explore basic sociological concepts relevant for the study of health and healthcare, such as social construction and medicalization. Students explore why, for instance, despite having the most expensive healthcare system, the United States ranks comparatively low in life expectancy and health and well-being outcomes. Provides students with an opportunity to explore the ways that societal factors such as race, class, and gender interplay with health, healthcare, and health disparities.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Health Science Requirements**

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260	The American Healthcare System	4
or PHTH 1261	Comparative Healthcare Systems	
PHTH 2300	Communication Skills for the Health Professions	4
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4
<b>Supporting Courses for Health Science</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

**Sociology Requirements**

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Social Change Selective</b>		
Complete one of the following:		4
SOCL 1260	Gender in a Changing Society	
SOCL 2268	Social Movements	
SOCL 3450	Class, Power, and Social Change	
<b>Social Inequality Selective</b>		
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 2225	Sociology of Disability	
SOCL 2270	Race and Ethnic Relations	
<b>Lower-Level Elective</b>		
Complete one of the following:		4
SOCL 1000 to SOCL 3999		
<b>Advanced Elective</b>		
Complete one of the following:		4
SOCL 4000 to SOCL 4999		

**Supporting Courses**

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
HSCI 1000	College: An Introduction	
SOCL 1000	Sociology at Northeastern	
<b>Writing in the First Year</b>		
ENGW 1111	First-Year Writing	4
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
SOCL 2320	Statistical Analysis in Sociology	
<b>Co-op Preparation (Based on Home College)</b>		
Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESH 2000	Professional Development for Co-op	
<b>Advanced Writing in the Discipline</b>		
Complete one of the following:		4
ENGW 3306	Advanced Writing in the Health Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
<b>NUPath: Ethical Reasoning</b>		
PHIL 1165	Moral and Social Problems in Healthcare	4
<b>Capstone (Based on Home College)</b>		
Complete one of the following:		4
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700))	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
SOCL 4600	Senior Seminar	

**Open Electives** 24**Integrative Requirement**

Code	Title	Hours
Choose one of the courses below:		4
SOCL 3441	Sociology of Health and Illness	
ANTH 3441	Medical Anthropology	

**Health Sciences GPA Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Program Requirement**

133 total semester hours required

**Plan of Study****Four Years, One Co-op Plan**

Year 1			
Fall	Hours	Spring	Hours
HSCI 1000 or SOCL 1000	1	BIOL 1113	4
PHTH 1260	4	BIOL 1114	1
BIOL 1111	4	ENGW 1111	4



510 Applied Psychology

BIOL 1112	1	Elective	4
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
SOCL 1101	4		
	18		18

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours
Public health core	4	SOCL 3300	4	Public health core	4
ANTH 1101	4	SOCL 2321	4	PHIL 1165	4
PHTH 2210 or SOCL 2321	4	Social change or social inequality selective	4		
Lower-level sociology elective	4	Public health core	4		
	16		16		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESH 2000	1	Co-op		Co-op		ENGW 3306 or 3308	4
ANTH 2305	4					PHTH 4540	4
Public health core	4						
Social inequality and social change selective	4						
Open electives	4						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	Capstone course	4
SOCL 3441	4	Open electives	12
Advanced sociology elective	4		
Open electives	4		
	16		16

Total Hours: 133

**Four Years, Two Co-ops Plan**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours
HSCI 1000 or SOCL 1000	1	ANTH 1101	4	PHTH 2350	4
PHTH 1260	4	BIOL 1113	4	Open Elective	4

PSYC 1101	4	BIOL 1114	1
BIOL 1111	4	ENGW 1111	4
BIOL 1112	1	CHEM 1161 and CHEM 1162 and CHEM 1163	5
SOCL 1101	4		
	18		18
			8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 2210 or SOCL 2321	4	Co-op		Co-op		ENGW 3306	4
Public health core	4			Open elective		4 PHIL 1165	4
HSCI 2000 or EESH 2000	1						
SOCL 2321	4						
SOCL 3300	4						
	17		0			4	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305	4	Co-op		Co-op		PHTH 4540	4
SOCL 3441	4			Open elective		4 Public health core	4
Lower-level sociology elective	4						
Public health core	4						
	16		0			4	8

**Year 4**

Fall	Hours	Spring	Hours
Social change or social inequality selective	4	Capstone course	4
Advanced sociology elective	4	Public health core	4
HSCI 4700 (if student will complete an HSCI capstone)	0	Social change or social inequality selective	4
Open electives	8	Open electives	4
	16		16

Total Hours: 133

**Applied Psychology**

**Robert J. Volpe, PhD**  
Professor & Chair

404 International Village

617.373.7970  
617.373.8892 (fax)  
caep@northeastern.edu

The Department of Applied Psychology offers a minor in health psychology that is designed for undergraduate students from a variety of disciplines within Bouvé and across the university who wish to expand and to apply their understanding in key concepts of behavioral science and how they inform and intersect with public health, prevention science, clinical applications, and interdisciplinary and interprofessional care.

## Programs

### Minors

- Health Psychology (p. 503)
- Mindfulness Studies (p. 511)

### Health Psychology, Minor

The objective of the minor in health psychology is to provide students with knowledge regarding the relationship between psychological and behavioral processes and health and illness. Distinct from other specialty areas in psychology, health psychology focuses on how biology, psychology, behavior, and social factors influence health and illness.

This minor seeks to benefit students by highlighting the unique features of this specialty area and help students understand how to apply this knowledge to the provision of health services and various career paths relevant to health psychology, should they choose to pursue careers in professional psychology focused on the promotion of health. The minor in health psychology is designed for undergraduate students from a variety of disciplines within Bouvé and across the university who wish to expand and to apply their understanding in key concepts of behavioral science and how they inform and intersect with public health, prevention science, clinical applications, and interdisciplinary and interprofessional care.

The minor is comprised of five courses. It requires two foundational courses, one that provides an introduction to the role of psychology in health, illness, and healthcare—Health Psychology: An Introduction to Concepts, Theories, and Research (CAEP 2012)—and one that focuses on the application of principles of behavior analysis to address common health problems, such as obesity, addiction, and adherence to medical procedures—Behavioral Assessment and Treatment of Health Problems in the 21st Century (CAEP 2101).

These courses instruct students on basic, foundational principles of mental/behavioral health and the role of psychology in overall health and well-being in applied settings. Students may choose three other electives based on their specific interests.

### Minor Requirements

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

### Required Courses

Code	Title	Hours
CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	4
CAEP 2101	Behavioral Assessment and Treatment of Health Problems in the 21st Century	4

### Elective Courses

Code	Title	Hours
Complete any three of the following:		
CAEP 2105	College Student Mental Health	12
CAEP 2106	History and Systems of Psychology	
CAEP 2107	Introduction to School Psychology	
CAEP 2899	Introduction to College Student Development and Student Affairs	
CAEP 3899	Relationships in College	
CAEP 4525	Introduction to Professional Psychology	
CAEP 5150	Early Intervention: Family Systems	
CAEP 5151	Early Intervention: Infant and Toddler Development, Risk, and Disability	
HLTH 5002	Mindfulness: Theory and Practice	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 3520	Child Intervention and Treatment	
PSYC 1101	Foundations of Psychology	
PSYC 3404	Developmental Psychology	

### GPA Requirement

2.000 GPA required in the minor

### Mindfulness Studies, Minor

The minor in mindfulness studies is open to all majors at the university. The term “mindfulness” refers to maintaining an awareness of the present moment without judgment. Modern-day mindfulness has roots in Eastern spiritual traditions including Buddhism and Hinduism; after arriving in the West, mindfulness practice became a mostly secular practice used by many to promote health and wellbeing. The minor in mindfulness studies is designed for students who seek to enrich their understanding of mindfulness practice, including its benefits and potential applications. Pursuing a minor in mindfulness studies will complement students’ knowledge in the related fields of psychology, health sciences, philosophy, and religious studies. However, developing a mindfulness practice and an understanding of the potential benefits and applications of mindfulness may help enrich the lives of students in any major. Whether students are interested in health, education, or business, by pursuing the minor in mindfulness studies they have an opportunity to learn how to develop a mindfulness practice and explore how to apply mindfulness to their career.

### Minor Requirements

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

### Required Courses

Code	Title	Hours
CAEP 1280	Introduction to Mindfulness	4
PHIL 1133	Selling Spirituality	4
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	4
or PHIL 2395	Japanese Buddhism	

## Electives

Code	Title	Hours
Complete two of the following:		
CAEP 1290	Personal Behavior Change	7-8
CAEP 3899	Relationships in College	
HLTH 5002	Mindfulness: Theory and Practice	
PHIL 1130	Ethics: East and West	
PHIL 1290	Chinese Philosophy and Religion	

## GPA and Grade Requirement

Minimum 2.000 GPA required in the minor. All coursework must be completed with a minimum grade of C.

## Credit Requirement

19 hours required

## Communication Sciences and Disorders

Website (<https://bouve.northeastern.edu/csd/>)

**Lorraine A. Book, PhD, CCC-SLP**  
Chair and Associate Clinical Professor

226 Forsyth Building  
617.373.3698  
617.373.2239 (fax)

The Department of Communication Sciences and Disorders (CSD) offers one undergraduate major (BS in Speech-Language Pathology and Audiology), a BS/MS PlusOne program, and two undergraduate minors.

Speech-language pathologists and audiologists (who require 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 individuals with communication delays/differences/disorders, from infants through geriatrics. Speech-language pathologists treat disorders such as developmental language and articulation disorders; voice and resonance problems; stuttering; pediatric and adult swallowing disorders; and language and cognitive impairments due to stroke, head injury, and progressive neurological 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.

## BS in Speech-Language Pathology

The Bachelor of Science degree program in speech-language pathology and audiology (SLPA) includes an experiential learning component, a broad-based academic core, and the scientific and clinical courses necessary for understanding normal and disordered communication. The degree offers preprofessional training for individuals who want to pursue graduate education in SLPA. Alternatively, graduates may be hired as speech and hearing assistants in a variety of clinical settings; or they may pursue other career paths in healthcare and education. The SLPA curriculum is designed to facilitate critical thinking, information literacy, and oral and written communication skills. In addition to coursework in the basic communication sciences, coursework is required in education, allied health, ethics, multicultural/diversity issues, and psychology. The curriculum provides a solid foundation in SLPA and basic sciences, and it is sufficiently flexible to provide students with the opportunity to minor in an area of related interest.

## BS/MS PlusOne Program

A unique aspect of the speech-language pathology and audiology (SLPA) program is a five-year BS/MS PlusOne program. Students who have maintained an overall GPA of 3.350 or better and a C or better in all SLPA courses; who have satisfied all graduate program admissions requirements; and who have access to a car and/or utilization of public transportation to get to and from all clinic assignments may seek admission to this program in their third year. Students will, if successful, earn the Bachelor of Science in Speech-Language Pathology and Audiology at the end of their fourth year and the Master of Science in Speech-Language Pathology at the end of the program, as well as meet national certification requirements. The PlusOne program is selective because of the intensity of the combined program.

## Minors

The two 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 life span. Advisors assist students minoring in this area with accommodating their interests and graduate plans.

### COMMUNICATION SCIENCES AND DISORDERS MINOR

The minor in communication sciences and disorders (CSD) includes courses that offer exposure to a variety of aspects of the CSD field. Students progress to graduate programs in fields such as applied psychology, linguistics, neuroscience, and education, among others; but the minor does not by itself prepare students for admission to graduate programs in speech-language pathology or audiology. Speech-language pathology and audiology courses are designed to help students develop entry-level competencies that will enable them to function in a preprofessional capacity in educational settings, medical and rehabilitation centers, and private-practice clinics.

The CSD minor consists of one required foundation course taken prior to any core or elective courses, then two core courses and one elective from either the remaining core courses in the list or from a specified set of elective courses that are taught outside of the CSD department.

### CLINICAL SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY MINOR

The minor in clinical speech-language pathology and audiology (SLPA) seeks to prepare students for admission into a graduate program in SLPA. In particular, students in this minor are on a track that, if supplemented with certain elective choices within their major, would meet all admissions requirements for our department's own MS Speech-Language Pathology (<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 majors and the clinical SLPA minor requirements.

Students pursuing this minor who plan to apply to graduate school at institutions other than Northeastern are advised to carefully check admissions requirements for those programs.

## Programs

### Bachelor of Science (BS)

- Speech-Language Pathology and Audiology
- Communication Studies and Speech-Language Pathology and Audiology (p. 176)
- Linguistics and Speech-Language Pathology and Audiology (p. 516)

## Minors

- Communication Sciences and Disorders (p. 517)
- Early Intervention (p. 518)
- Speech-Language Pathology and Audiology (p. 518)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Speech-Language Pathology and Audiology, BS

The Bachelor of Science degree program in speech-language pathology and audiology includes an experiential learning component, a broad-based academic core, and the scientific and clinical course work necessary for understanding normal and disordered communication. The degree offers preprofessional training for individuals who want to pursue graduate education in speech-language pathology and audiology. Alternatively, graduates may be hired as speech-language pathology assistants in a variety of clinical settings or they may pursue other career paths in healthcare and education.

The speech-language pathology and audiology curriculum is designed to facilitate critical thinking, information literacy, and oral and written communication skills. In addition to courses in the basic communication sciences, courses in education, allied health, computer literacy, ethics, multicultural/diversity issues, and psychology are required. The curriculum provides a solid foundation in speech-language pathology and audiology and basic sciences, and it is sufficiently flexible to provide students with the opportunity to minor in an area of related interest.

Please visit Bouvé College Learning Outcomes (<https://bouve.northeastern.edu/bchs/about/learning-outcomes/>) for the specific student learning outcomes for this program.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (<http://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/>).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (<http://catalog.northeastern.edu/undergraduate/university-academics/nupath/>).

## Speech-Language Pathology and Audiology Major Courses

Code	Title	Hours
SLPA 1000	College: An Introduction (College: An Introduction)	1
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1200	Phonetics	4
SLPA 1203	Introduction to Audiology	4

SLPA 1205	Speech and Hearing Science	4
SLPA 2000	Introduction to Co-op	1
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 6219	Aural Rehabilitation	4
HLTH 5450	Healthcare Research	4
PHTH 2300	Communication Skills for the Health Professions	4

## Supporting Courses

Code	Title	Hours
BIOL 2217	Integrated Anatomy and Physiology 1	4
BIOL 2218	Lab for BIOL 2217	1
BIOL 2219	Integrated Anatomy and Physiology 2	4
BIOL 2220	Lab for BIOL 2219	1
ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions	4
PSYC 1101	Foundations of Psychology	4
PSYC 3404	Developmental Psychology	4
PSYC 3466	Cognition	4
PHYS 1145	Physics for Life Sciences 1	4
PHYS 1146	Lab for PHYS 1145	1
MATH 1215	Mathematical Thinking	4
MATH 1241	Calculus 1	
MATH 2280	Statistics and Software	4
PHIL 1165	Moral and Social Problems in Healthcare	4
	NUpath Interpreting Cultures (IC) Elective	4
	NUpath Ethical Reasoning (ER) Elective	4
	Complete one PSYC course (1000-5999)	4
	Complete one EDUC course (1000-5999)	4

## Required General Electives

Code	Title	Hours
	Complete general electives for a minimum of 20 credits	20

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World (ND)
- Exploring Creative Expression and Innovation (EI)
- Conducting Formal and Quantitative Reasoning (FQ)
- Understanding Societies and Institutions (SI)
- Engaging Difference and Diversity (DD)
- Writing in the First Year (WF)
- Advanced Writing in the Disciplines (WD)
- Writing-Intensive in the Major (WI, two required courses)
- Demonstrating Thought and Action in a Capstone (CE)

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

Students are responsible for using the general electives in this program to complete NUpath requirements not satisfied by required courses in this program.

## Speech-Language Pathology and Audiology Major Requirement

A grade of C or higher is required in all SLPA courses. A grade of C– or higher is required for BIOL, MATH, and PHYS courses.

### Program Requirement

133 total semester hours required.

### Plan of Study

#### Year 1

Fall	Hours	Spring	Hours
ENGW 1111 (WF)	4	SLPA 1101 (ND)	4
MATH 1215 or 1241 (AD)	4	SLPA 1205	4
PSYC 1101 (ND, SI)	4	BIOL 2219	4
SLPA 1000 (College: An Introduction)	1	BIOL 2220	1
BIOL 2217	4	NUpath Interpreting Cultures (IC) elective	4
BIOL 2218	1		
	18		17

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SLPA 2000	1	COOP 3945 (EX)	0	COOP 3945 (EX)		Elective	4
SLPA 1203	4					Elective	4
PHYS 1145	4						
PHYS 1146	1						
PSYC 3404	4						
SLPA 1103	4						
	18		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 2	Hours
ENGW 3306 (WD)	4	SLPA 1200	4	Elective	4
MATH 2280 (AD)	4	SLPA 1102	4	Elective	4
PSYC 3466	4	HLTH 5450 (FQ, WI, ND)	4		
PHTH 2300 (DD, EI)	4	NUpath Ethical Reasoning (ER) elective	4		
	16		16		8

#### Year 4

Fall	Hours	Spring	Hours
SLPA 5107 (WI, CE)	4	SLPA 4651	4
SLPA 5110	4	PHIL 1165	4
PSYC elective	4	SLPA 6219	4

Elective	4 EDUC elective	4
		16
		16

Total Hours: 133

## Communication Studies and Speech-Language Pathology and Audiology, BS

The combined Bachelor of Science in Communication Studies and Speech-Language Pathology and Audiology offers an interdisciplinary approach to human communication and its disorders. Coursework focuses on the scientific and theoretical frameworks of speech, language, and hearing. Students will also be introduced to the fundamentals of communication theory, and they have an opportunity to acquire the practical skills necessary to thrive in a complex and changing society. The curriculum is enhanced by experiential learning opportunities in a clinical setting that prepare the students for a variety of professional careers.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### First-Year Seminar

Code	Title	Hours
COMM 1000	Communication Studies at Northeastern	1
or SLPA 1000	College: An Introduction	

### Communication Studies Requirements

Code	Title	Hours
No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.		

#### Communication Studies Common Requirements

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

#### Foundation Course

Complete one of the following:			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 (COMM 3201 is strongly recommended): 8

COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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 COMM courses. 12

**Speech-Language Pathology and Audiology Requirements**

Code	Title	Hours
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All courses in these sections must be completed with a C or better.

**SLPA Requirements**

SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1200	Phonetics	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 2000	Introduction to Co-op	1
or EEAM 2000	Professional Development for Co-op	
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

**Supporting Courses**

Code	Title	Hours
PSYC 1101	Foundations of Psychology	4
ENGW 1111	First-Year Writing	4
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
HLTH 2100	Interprofessional Ethics for Individual and Population Health	4
PHTH 2300	Communication Skills for the Health Professions	4
PSYC 2320	Statistics in Psychological Research	4

**Integrative Course**

Code	Title	Hours
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Note: The selected integrative course counts toward the COMM writing-intensive (COMM 3201) or COMM elective (COMM 4102) as appropriate.

COMM 3201	Health Communication (WI)	
or COMM 4102	Health Communication Campaigns	

**Plan of Study**

**Sample 4 Years, 2 Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or SLPA 1000	1	Communication studies foundation course	4	COMM 1112	4	Communication studies elective	4
COMM 1101	4	SLPA 1101	4	Communicati studies elective	4	General elective	4
BIOL 2217 and BIOL 2218	5	SLPA 1205	4				
PSYC 1101	4	BIOL 2219 and BIOL 2220	5				
ENGW 1111	4						
		18			17		
						8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000 or SLPA 2000	1	Co-op	0	Co-op	0	Vacation	0
Communicati studies cluster course	4						
SLPA 1203	4						
PHYS 1145 and PHYS 1146	5						
SLPA 1103	4						
		18			0		
						0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 3409 or ENGW 3306	4	PSYC 2320 or MATH 2280	4	Vacation or optional co-op #2	0	Vacation or optional co-op #2	0



Communicati studies elective	4	SLPA 1102	4		
PHTH 2300	4	Communication studies writing- intensive	4		
HLTH 2100 or PHIL 1165	4	SLPA 1200	4		
	16		16	0	0
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
SLPA 5110	4	SLPA 4651	4		
SLPA 5107	4	SLPA 6219	4		
General elective	4	COMM 3201	4		
General elective	4	General elective	4		
	16		16		

Total Hours: 133

A general elective or a COMM elective (e.g., COMM 1120) can be taken to fulfill the NUpath Formal/Quantitative Reasoning (FQ) requirement.

## Linguistics and Speech-Language Pathology and Audiology, BS

The combined major in linguistics and speech-language pathology and audiology provides students with extensive background in the formal structures of human language; the methods and applications of linguistic analyses of language data; the biology, neurology, and physics of the human vocal tract; and the nature of both normal and disordered human speech communication and language development. Students have an opportunity to develop critical thinking, information literacy, and strong oral and written communication skills. While on co-op, students gain clinical experience, including preprofessional training appropriate to pursue a graduate degree in SLPA, related clinical healthcare domains, or education.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4

### Linguistic Structure

LING 3420	Phonetics (Integrative course)	4
LING 3422	Phonology	4
LING 3450	Syntax	4
LING 3424 or LING 3452	Morphology Semantics	4

### Psychology Requirements

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4

### Linguistics Elective

Complete one of the following, not counted elsewhere:		
LING 3424	Morphology	4
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
LING 4993	Independent Study	
PSYC 3404	Developmental Psychology	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	

### Speech-Language Pathology and Audiology Requirements

Code	Title	Hours
All courses in these sections must be completed with a C or better.		

#### Speech-Language Pathology and Audiology

SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

#### Biology and Physics Requirements

BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
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**Integrative Requirement**

Code	Title	Hours
The following course is taken in another area of the major:		
LING 3420	Phonetics	4

**Supporting Courses**

Code	Title	Hours
ENGW 3306	Advanced Writing in the Health Professions	4
HLTH 2100 or PHIL 1165	Interprofessional Ethics for Individual and Population Health Moral and Social Problems in Healthcare	4
PHTH 2300	Communication Skills for the Health Professions	4

**Major Credit Requirement**

Complete 104 hours in the major.

**Program Requirements**

128 total semester hours required

**Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2217 and BIOL 2218	5	BIOL 2219 and BIOL 2220	5	Vacation		Vacation	
ENGW 1111	4	LING 2350	4				
PSYC 1101	4	SLPA 1101	4				
LING 1150	4	SLPA 1205	4				
SLPA 1000 or LING 1000	1						
		18		17		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3420	4	Co-op		Co-op		Elective	4
PHYS 1145 and PHYS 1146	5					Elective	4
SLPA 1103	4						
SLPA 1203	4						
SLPA 2000	1						
		18		0		8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3306	4	HLTH 2100 or PHIL 1165	4	Vacation		Elective	4
LING 3422 or 3450	4	LING 3422 or 3450	4			Elective	4
PHTH 2300	4	PSYC 3464	4				
PSYC 2320	4	SLPA 1102	4				
		16		16		8	

**Year 4**

Fall	Hours	Spring	Hours
LING 3412	4	LING 3424 or 3452	4
SLPA 5107	4	SLPA 4651	4
SLPA 5110	4	SLPA 6219	4
Linguistics elective	4	Elective	4
		16	

Total Hours: 133

**Communication Sciences and Disorders, Minor**

The communication sciences and disorders (CSD) minor consists of one required foundation course taken prior to any core or elective courses, then two core courses and one elective from either the remaining core courses in the list or from a specified set of elective courses that are taught by units other than the CSD department. Students may consult with an advisor in the CSD department concerning the current listing of eligible elective courses for the CSD minor.

**Minor Requirements**

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

**Foundation Course**

Code	Title	Hours
Complete one of the following: 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. 3-6		
AMSL 1101	Elementary ASL 1	
CAEP 3480	Counseling Theories and Practice	
COMM 1112	Public Speaking	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 2534	Group Communication	

ENTR 2301	Innovation!
HLTH 1510	Introduction to Healthcare Ethics
PHTH 2300	Communication Skills for the Health Professions
PHTH 2301	Communication Skills for the Health Professions—Global
PSYC 3450	Learning and Motivation
PSYC 3451	Learning Principles and Behavior Analysis

### Minor Credit Requirement

Minimum of 15 semester hours required in the minor

### GPA Requirement

2.000 GPA required in the minor

## Early Intervention, Minor

The interdisciplinary concentration in early Intervention (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.

### Minor Requirements

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

### Required Courses

Code	Title	Hours
CAEP 5150	Early Intervention: Family Systems	3
CAEP 5151	Early Intervention: Infant and Toddler Development, Risk, and Disability	3
SLPA 5152	Early Intervention: Planning and Evaluating Services	3
CAEP 5153	Early Intervention: Assessment and Intervention	3
SLPA 5154	Early Intervention Practicum 1	2
SLPA 5155	Early Intervention Practicum 2	2

### GPA Requirement

2.000 GPA required in the minor

## Speech-Language Pathology and Audiology, Minor

The clinical SLPA minor seeks to prepare students for admission into a graduate program in speech-language pathology or audiology. In particular, students in this minor are on a track that, if supplemented with certain elective choices within their major, would meet all admissions requirements for our department's own MS/SLP (<http://catalog.northeastern.edu/graduate/health-sciences/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:		
SLPA 1101	Introduction to Communication Disorders	4
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 (<https://bouve.northeastern.edu/health-sciences/>)

**Sharon L. Harlan, PhD**  
Professor and Chair

316 Robinson Hall  
617.373.7326  
617.373.2968 (fax)

The Department of Health Sciences in the Bouvé College of Health Sciences at Northeastern University provides a unique, transdisciplinary setting that incorporates instruction, research, and practice and seeks to prepare students for a wide range of career paths. The department offers a bachelor's degree in health sciences and options for combined majors with the D'Amore-McKim School of Business; the College of Arts, Media and Design; the College of Social Sciences and Humanities; the College of Science; the College of Engineering; and the Khoury College of Computer and Information Science, in addition to minors in exercise science, public health, global health, nutrition, health research methods, and health science. We also offer several graduate degrees: Master of Public Health, Master of Science in Exercise Science, and a combined master in the two fields. We also collaborate with the Khoury College of Computer Sciences to offer a Master of Science in Health Informatics, as well as combined graduate degrees with the School of Pharmacy, the Physician Assistant Program, and the School of Law. At the doctoral level, we offer a PhD in Population Health and, in cooperation with Khoury, a PhD in Personal Health Informatics. Finally, we offer a Graduate Certificate in Exercise Science for Clinicians.

Our diverse faculty has expertise in the fields of population health; health disparities; nutrition; social epidemiology; exercise science; medical sociology; public policy; personal health technologies;

neurodevelopmental disorders; environmental, occupational, and mental health; among many more. Students have the opportunity to work side by side with faculty in conducting cutting-edge research in these fields. We also have research staff highly skilled in providing unique, specialized dietary assessment services.

In line with Northeastern's commitment to interdisciplinary research and urban engagement, we teach and work closely with many other schools, centers, and departments in the university, including the Institute for Health Equity and Social Justice Research (IHESJR), the Center for Community Health Education Research and Service (CCHERS), the Social Science Environmental Health Research Institute (SSEHRI), and the Center for Health Policy and Healthcare Research (CHPHR), as well as community agencies and neighborhood health centers in the local Boston area and beyond.

## Programs

### Bachelor of Science (BS)

- Health Science (p. 519)

### Combined Majors

- Data Science and Health Science (p. 400)
- Health Science and Business Administration (p. 280)
- Health Science and Communication Studies (p. 177)
- Health Science and Sociology (p. 508)
- Health Science and Psychology (p. 530)
- Environmental Engineering and Health Science (p. 450)

### Minors

- Exercise Science (p. 501)
- Global Health (p. 501)
- Health Science (p. 538)
- Health, Humanities, and Society (p. 502)
- Health Research Methods (p. 503)
- Healthcare System Operations (p. 498)
- Nutrition (p. 504)
- Public Health (p. 539)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## 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
- Pharmacy
- Physical Therapy
- Social work
- Speech-Language Pathology

The health science major is also designed for students who are seeking a strong foundation for a career in health administration and in community-based health promotion and public health.

Please visit Bouvé College Learning Outcomes (<https://bouve.northeastern.edu/learning-outcomes/>) for the specific student learning outcomes for this program.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Public Health Core

Code	Title	Hours
<b>YEAR 1</b>		
PHTH 1260	The American Healthcare System	4
or PHTH 1261	Comparative Healthcare Systems	
<b>YEARS 2 and 3</b>		
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300	Communication Skills for the Health Professions	4
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	
PHTH 2515	Healthcare Policy and Administration	4
HLTH 5450	Healthcare Research	4
or PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
PHTH 4540	Health Education and Program Planning	4
<b>FINAL YEAR</b>		
PHTH 4120	Global Perspectives on Discrimination and Health	4

### Health Science Courses

Code	Title	Hours
<b>YEAR 1</b>		
HSCI 1000	College: An Introduction	1
<b>YEAR 2 OR 3</b>		
HSCI 2000	Professional Development for Bouvé Co-op	1
<b>FINAL YEAR</b>		
Complete one of the following.		4-8
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	

HSCI 4971	Junior/Senior Honors Project 2 (Prerequisite course HSCI 4970, for a total of 8 cr)
HSCI 4740	Health Science Capstone Seminar (Prerequisite course HSCI 4700)

## Selectives

Code	Title	Hours
Complete at least three courses from the groups listed below with at least two in one category. At least one of the courses must be at 2000 level or higher. Students may complete additional courses to fulfill a minor, such as Global Health, Nutrition, Exercise Science, and Health Research Methods.		

### Society and Health

ANTH 2365	Sport, Culture, and Society
ANTH 3441	Medical Anthropology
ANTH 4580	Special Topics in Anthropology
HLTH 5280	The (in)Visibility of (dis)Ability in Society
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHTH 1120 or SOCL 1120	Society and Health
PHTH 1270 or AFRS 1270	Introduction to Global Health
PHTH 2414	Environmental Health
PHTH 5222	Health Advocacy
PHTH 5230	Global Health
PHTH 5234	Economic Perspectives on Health Policy
SOCL 1246	Environment and Society
SOCL 1295	Drugs and Society
CRIM 3040	Psychology of Crime
SOCL 2303	Gender and Reproductive Justice
SOCL 3441	Sociology of Health and Illness
SOCL 3485	Environment, Technology, and Society
SOCL 4523	Sexualities

### Policy and Administration

ENTR 2206	Global Social Enterprise
HUSV 2800	Sexual Orientation and Gender Expression
MGMT 3340	Healthcare Management, Innovation, and Design
ORGB 3201	Organizational Behavior
PHTH 4511	Healthcare Management
PHTH 4515	Critical Issues in Health and Public-Health Policy
PHTH 5214	Environmental Health
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy
SOCL 1241	Violence and Society

### Physical Activity and Nutrition

COMM 3201	Health Communication
EXSC 1120	Introduction to Exercise, Fitness, and Health

EXSC 4500 and EXSC 4501	Exercise Physiology 1 and Lab for EXSC 4500
EXSC 5200	Cardiopulmonary Physiology
EXSC 5220	Advanced Exercise Physiology
HSCI 1105 or HSCI 1107	Human Nutrition Nutrition Service Learning
HSCI 1106	Contemporary Issues in Nutrition
HSCI 2350	Advanced Nutrition in Health and Disease
HSCI 2500	Public Health Nutrition in the Community

### Digital Health

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
HINF 5101	Introduction to Health Informatics and Health Information Systems
HINF 5200	Theoretical Foundations in Personal Health Informatics
HINF 5300	Personal Health Interface Design and Development
IS 2000	Principles of Information Science

### Research

PHTH 3250	Fundamentals of Qualitative Research
PHTH 5202	Introduction to Epidemiology
PHTH 5440	Community-Based Participatory Research: Environmental Health

## Supporting Courses

Code	Title	Hours
<b>YEAR 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4
<b>YEAR 2 OR 3</b>		
PHIL 1165 or HLTH 2100	Moral and Social Problems in Healthcare Interprofessional Ethics for Individual and Population Health	4

## Writing Requirements

Code	Title	Hours
<b>YEAR 1</b>		
ENGW 1111	First-Year Writing	4
<b>YEAR 2 OR 3</b>		
ENGW 3306	Advanced Writing in the Health Professions	4

## Electives

Code	Title	Hours
	Complete a minimum of 41 credits of general electives. Total elective semester hours required to meet degree completion requirement will depend on student's choice of Selectives above.	41

## Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

## Program Requirement

132 total semester hours required

## Plan of Study

In addition to the required courses for the BS in Health Science, students who are interested in pre-health graduate school programs are encouraged to enroll in the following courses, utilizing available elective slots:

## Pre-med Track

Code	Title	Hours
SOCL 1101	Introduction to Sociology	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

## Pre-PA Track

Each Physician Assistant (PA) program is unique and students must research prerequisite courses for the programs to which they plan to apply. Common courses students preparing for PA school take as their electives often include:

Code	Title	Hours
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
PSYC 3404	Developmental Psychology	4

## Pre-Pharmacy Track

Code	Title	Hours
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5

## Pre-Physical Therapy Track

Code	Title	Hours
EXSC 4500	Exercise Physiology 1	4
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
PSYC 3404	Developmental Psychology	4

## Pre-Speech Language Pathology Track

Code	Title	Hours
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1200	Phonetics	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4

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

This is a sample plan of study.

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 1000	1	BIOL 1113	4	Vacation	0	Vacation	0
PHTH 1260	4	BIOL 1114	1				
PSYC 1101	4	ENGW 1111	4				
BIOL 1111	4	Elective	4				
BIOL 1112	1	CHEM 1161	4				
MATH 1241	4	CHEM 1162	1				
		CHEM 1163	0				
	18		18		0		0

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 2350	4	PHTH 2515	4	Vacation	0	Co-op	0
PHTH 2210	4	HSCI 2000	1				
Electives	8	HLTH 1200 and HLTH 1201	3				
		Electives	8				
	16		16		0		0



**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHIL 1165	4	Vacation	0	Vacation	0
		Selective	4-5				
		ENGW 3306	4				
		PHTH 2300	4				
	0		16		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HLTH 5450 or PHTH 4202	4	Co-op	0	Co-op	0	Vacation	0
PHTH 4540	4						
Elective <sup>1</sup>	4-5						
Selective <sup>1</sup>	3-5						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
PHTH 4120	4	HSCI 4720 or 4730	4
HSCI 4700	0	Electives	12
Selective	3-5		
Electives	8-9		
	16		16

Total Hours: 132

<sup>1</sup> Credit count of Selective/Elective is dependent on credit count of Selective/Elective in same term, to avoid unintended credit overload.

## Data Science and Health Science, BS

The health science and computer science combined major offers a solid academic and experiential foundation integrating studies in health administration, computer science, mathematics, and statistics. This program reflects the impact of data in modern healthcare and prepares students for success in careers in health administration, community-based health promotion, public health, and big data analysis.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1

CS 1210	Professional Development for Khoury Co-op	1
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### Computer Science Foundation

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3500	Object-Oriented Design	4
CS 3200	Database Design	4

### Information Science Requirement

IS 4300	Human Computer Interaction	4
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### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

### Supporting Courses for Data Science

Code	Title	Hours
MATH 1341 or MATH 1241	Calculus 1 for Science and Engineering Calculus 1	4

### Data Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		

ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
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### Advanced Writing in the Disciplines

ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4
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### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

### Supporting Courses for Health Science

Code	Title	Hours
<b>Research Methods</b>		
Complete one of the following:		4
HLTH 5450	Healthcare Research	
or PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
IS 4800	Empirical Research Methods	
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
PSYC 2320	Statistics in Psychological Research	
ECON 2350	Statistics	
ENVR 2500	Biostatistics	
MATH 3081	Probability and Statistics	
<b>Philosophy</b>		
Complete one of the following:		4
PHIL 1145	Technology and Human Values	
PHIL 1165	Moral and Social Problems in Healthcare	
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
PSYC 1101	Foundations of Psychology	4

### Integrative Requirement

Code	Title	Hours
<b>Upper-Division Elective</b>		
Complete four credits from the following:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
PHTH 4000 or higher		
HSCI 4000 or higher		
<b>Integrative Course</b>		
DS 4900	Data Science Senior Project	4

### Required General Electives

Code	Title	Hours
Complete 16 credits general electives.		16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Program Requirement

136 semester hours required

### Plan of Study Five Year, Two Co-op Sample Plan of Study

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation
CS 2500 and CS 2501	5	BIOL 1113 and BIOL 1114	5			
CS 1800 and CS 1802	5	PSYC 1101	4			
BIOL 1111 and BIOL 1112	5	MATH 1341	4			
ENGW 1111	4					
		20	18	0	0	0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
PHTH 1260	4	CS 1210	1	Vacation		Co-op
PHTH 2300	4	PHTH 2515	4			
CS 3500	4	DS 3000	4			
CHEM 1161 and CHEM 1162 and CHEM 1163	5	CS 3200	4			
		General Elective	4			
		17	17	0	0	0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		IS 4300	4	Vacation		Co-op
		DS 4200	4			
		PHTH 2350	4			
		Statistics Course	4			
		0	16	0	0	0
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		Upper Division Elective	4	Vacation		Vacation
		DS 4300	4			
		ENGW 3302	4			
		General Elective	4			
		0	16	0	0	0
Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
PHTH 4540	4	DS 4900	4			
HLTH 5450, PHTH 4202, or IS 4800	4	DS 4400	4			
PHIL 1145 or 1165	4	PHTH 4120	4			

General Elective	4 General Elective	4
	16	16

Total Hours: 136

## 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4
HLTH 5450 or PHTH 4202	Healthcare Research Principles of Epidemiology in Medicine and Public Health	4
<b>Life Sciences Core</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
PSYC 1101	Foundations of Psychology	4

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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### Business Administration Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
<b>Business Electives</b>		
Complete two of the following:		8
MISM 2301	Management Information Systems	
MKTG 2201	Introduction to Marketing	
SCHM 2301	Supply Chain and Operations Management	
ORGB 3201	Organizational Behavior	
<b>Supporting Courses for Business</b>		
Complete one of the following:		4
ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	

### Business Concentration

Complete one of the following concentrations. Requirements for the concentrations are listed below. (p. )

- Accounting (p. )
- Corporate Innovation and Venture
- Entrepreneurial Startups
- Entrepreneurship and New Venture Management (p. )
- Family Business
- Finance (p. )
- Fintech
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. )
- Management Information Systems (p. )
- Marketing (p. )
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship
- Supply Chain Management (p. )

### Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
HSCI 1000 or BUSN 1102	College: An Introduction Personal Skill Development for Business	1
<b>Calculus</b>		
MATH 1231 or MATH 1241	Calculus for Business and Economics Calculus 1	4
<b>Statistics</b>		
PHTH 2210 or MGSC 2301	Foundations of Biostatistics Business Statistics	4

**Co-op Preparation**

Complete one of the following:			1
BUSN 1103	Professional Development for Business Co-op		
HSCI 2000	Professional Development for Bouvé Co-op		

**Writing**

ENGW 1111	First-Year Writing		4
ENGW 3306	Advanced Writing in the Health Professions		4
or ENGW 3304	Advanced Writing in the Business Administration Professions		

**Capstone**

Complete one of the following:			4
STRT 4501	Strategy in Action		
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700)		
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)		

**Integrative Requirement**

Code	Title	Hours
MGMT 3340	Healthcare Management, Innovation, and Design	4

**Required General Electives**

Code	Title	Hours
Complete at least 16 credits of general electives		16

**Business GPA Requirement**

A minimum 2.000 GPA is required in all business courses.

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Plan of Study**

Year 1			
Fall	Hours	Spring	Hours
HSCI 1000 or BUSN 1102	1	BIOL 1113 and BIOL 1114	5
PHTH 1260	4	ENGW 1111	4
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
BIOL 1111 and BIOL 1112	5	Elective	4
MATH 1241 or 1231	4		
		18	18

**Year 2**

Fall	Hours	Spring	Hours	Summer 2	Hours
PHTH 2210 or MGSC 2301	4	HSCI 2000 or BUSN 1103	1	Co-op	
PHTH 2350	4	PHTH 2300	4		
ECON 1115 or 1116	4	PHTH 2515	4		
ACCT 1201	4	FINA 2201	4		
		INTB 1203	4		
		16	17		0

**Year 3**

Fall	Hours	Spring	Hours
Co-op		HLTH 5450 or PHTH 4202	4
		Elective or Concentrator Course	4
		ACCT 2301	4
		Business Core Selective #1	4
		0	16

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 3306 or 3304	4	Co-op		Co-op	
PHTH 4540	4				
MGMT 3340	4				
Business Core Selective #2	4				
		16	0		0

**Year 5**

Fall	Hours	Spring	Hours
PHTH 4120	4	HSCI 4720, 4730, or STRT 4501	4
HSCI 4700	0	Electives or Concentrator Courses	12
Electives or Concentration Courses	12		
		16	16

Total Hours: 133

**Health Science and Communication Studies, BS**

The combined Bachelor of Science degree program in health science and communication studies offers an interdisciplinary approach to public health communication. Students combine courses from health sciences and communication studies to learn about health and illness and the important role of communication in shaping the public's understanding of health issues. The interdisciplinary curriculum is enhanced by experiential learning opportunities and is designed to prepare students for challenging careers that involve crafting messages about health,

developing strategies for promoting healthcare services, and specific applications such as disease awareness and prevention.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

## Communication Studies Major Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112 or COMM 2301	Public Speaking Communication Research Methods	4

Code	Title	Hours
<b>Foundation Course</b>		

Complete one of the following: 4

COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	

### Cluster Course

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	

### Writing-Intensive

Complete two of the following: 8

COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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	
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## Communication Studies Electives

Complete three additional communication studies courses. 12

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2210	Foundations of Biostatistics	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

## Life Sciences

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
MATH 1241	Calculus 1	4
PSYC 1101	Foundations of Psychology	4
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Other Requirements

Code	Title	Hours
<b>Intro to College</b>		

HSCI 1000 or COMM 1000	College: An Introduction Communication Studies at Northeastern	1
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### Professional Development

HSCI 2000 or EEAM 2000	Professional Development for Bouvé Co-op Professional Development for Co-op	1
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### Writing

ENGW 1111	First-Year Writing	4
ENGW 3306	Advanced Writing in the Health Professions (or other Advanced Writing course)	4

**Electives 28**

## Integrative Course

Code	Title	Hours
<b>Capstone</b>		
HSCI 4720 or HSCI 4730	Health Science Capstone—Service Health Science Capstone—Research	4

or COMM 4102	Health Communication Campaigns
or COMM 4530	Communication and Quality of Life
or COMM 4603	Advocacy Workshop

### Health Sciences Major Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

### Communication Studies Major Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
HSCI 1000 or COMM 1000	1	BIOL 1113	4	Public health core	4	Vacation	0		
PHTH 1260	4	BIOL 1114	1	Elective	4				
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5						
BIOL 1112	1	Elective	4						
MATH 1241	4	ENGW 1111	4						
PSYC 1101	4								
		18			18			8	0
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Public health core	4	Co-op		Co-op		ENGW 3306	4		
HSCI 2000 or EEAM 2000	1	Elective	4			Elective	4		
COMM 1101	4								
COMM 1112 or 2301	4								
COMM elective	4								
		17			4			0	8
Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Public health core	4	Co-op		Co-op		Public health core	4		
Foundation course	4	Elective	4			Public health core	4		
Public health core	4								
Cluster course	4								
		16			4			0	8

Year 4			
Fall	Hours	Spring	Hours
Public health core	4	HSCI 4720, 4730, COMM 4102, COMM 4530, or COMM 4603	4
Elective	4	COMM elective	4
COMM WI course	4	COMM WI course	4
COMM elective	4	Elective	4
		16	16

Total Hours: 133

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

This is a sample plan of study.

Year 1									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
HSCI 1000 or COMM 1000	1	BIOL 1113	4	Vacation	0	Vacation	0		
PHTH 1260	4	BIOL 1114	1						
PSYC 1101	4	ENGW 1111	4						
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5						
BIOL 1112	1	Elective	4						
MATH 1241	4								
		18			18			0	0
Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Public health core	4	HSCI 2000 or EEAM 2000	1	Vacation	0	Co-op	0		
Public health core	4	Public health core	4						
COMM 1101	4	Foundation course	4						
COMM 1112 or 2301	4	Elective	4						
		Cluster course	4						
		16			17			0	0
Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Co-op	0	ENGW 3306	4	Vacation	0	Vacation	0		
		Public health core	4						
		COMM electives	8						
		0			16			0	0
Year 4									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
PHTH 4202	4	Co-op	0	Co-op	0	Vacation	0		



PHTH 4540	4			
COMM elective	4			
COMM WI course	4			
	16	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
PHTH 4120	4	HSCI 4720, 4730, COMM 4102, COMM 4530, or COMM 4603	4
HSCI 4700	0	Electives	12
COMM WI course	4		
Electives	8		
	16		16

Total Hours: 133

## Health Science and Sociology, BS

The combined Bachelor of Science in Health Science and Sociology integrates social scientific perspectives to the study of health, illness, and healthcare. Students explore basic sociological concepts relevant for the study of health and healthcare, such as social construction and medicalization. Students explore why, for instance, despite having the most expensive healthcare system, the United States ranks comparatively low in life expectancy and health and well-being outcomes. Provides students with an opportunity to explore the ways that societal factors such as race, class, and gender interplay with health, healthcare, and health disparities.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4

PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4

### Supporting Courses for Health Science

PSYC 1101	Foundations of Psychology	4
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

### Sociology Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Social Change Selective</b>		
Complete one of the following:		4
SOCL 1260	Gender in a Changing Society	
SOCL 2268	Social Movements	
SOCL 3450	Class, Power, and Social Change	
<b>Social Inequality Selective</b>		
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 2225	Sociology of Disability	
SOCL 2270	Race and Ethnic Relations	
<b>Lower-Level Elective</b>		
Complete one of the following:		4
SOCL 1000 to SOCL 3999		
<b>Advanced Elective</b>		
Complete one of the following:		4
SOCL 4000 to SOCL 4999		

### Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
HSCI 1000	College: An Introduction	
SOCL 1000	Sociology at Northeastern	
<b>Writing in the First Year</b>		
ENGW 1111	First-Year Writing	4
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
SOCL 2320	Statistical Analysis in Sociology	

**Co-op Preparation (Based on Home College)**

Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESH 2000	Professional Development for Co-op	

**Advanced Writing in the Discipline**

Complete one of the following:		4
ENGW 3306	Advanced Writing in the Health Professions	
ENGW 3308	Advanced Writing in the Social Sciences	

**NUPath: Ethical Reasoning**

PHIL 1165	Moral and Social Problems in Healthcare	4
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**Capstone (Based on Home College)**

Complete one of the following:		4
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700))	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
SOCL 4600	Senior Seminar	

**Open Electives 24**

**Integrative Requirement**

Code	Title	Hours
Choose one of the courses below:		4
SOCL 3441	Sociology of Health and Illness	
ANTH 3441	Medical Anthropology	

**Health Sciences GPA Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Four Years, One Co-op Plan**

Year 1			
Fall	Hours	Spring	Hours
HSCI 1000 or SOCL 1000	1	BIOL 1113	4
PHTH 1260	4	BIOL 1114	1
BIOL 1111	4	ENGW 1111	4
BIOL 1112	1	Elective	4
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
SOCL 1101	4		
		18	18

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
Public health core	4	SOCL 3300	4	Public health core	4
ANTH 1101	4	SOCL 2321	4	PHIL 1165	4

PHTH 2210 or SOCL 2321	4	Social change or social inequality selective	4
Lower-level sociology elective	4	Public health core	4
		16	16
			8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESH 2000	1	Co-op		Co-op		ENGW 3306 or 3308	4
ANTH 2305	4					PHTH 4540	4
Public health core	4						
Social inequality and social change selective	4						
Open electives	4						
		17		0		0	8

Year 4			
Fall	Hours	Spring	Hours
Public health core	4	Capstone course	4
SOCL 3441	4	Open electives	12
Advanced sociology elective	4		
Open electives	4		
		16	16

Total Hours: 133

**Four Years, Two Co-ops Plan**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
HSCI 1000 or SOCL 1000	1	ANTH 1101	4	PHTH 2350	4
PHTH 1260	4	BIOL 1113	4	Open Elective	4
PSYC 1101	4	BIOL 1114	1		
BIOL 1111	4	ENGW 1111	4		
BIOL 1112	1	CHEM 1161 and CHEM 1162 and CHEM 1163	5		
SOCL 1101	4				
		18	18		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 2210 or SOCL 2321	4	Co-op		Co-op		ENGW 3306	4
Public health core	4			Open elective		4 PHIL 1165	4
HSCI 2000 or EESH 2000	1						
SOCL 2321	4						
SOCL 3300	4						
	17		0			4	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305	4	Co-op		Co-op		PHTH 4540	4
SOCL 3441	4			Open elective		4 Public health core	4
Lower-level sociology elective	4						
Public health core	4						
	16		0			4	8

**Year 4**

Fall	Hours	Spring	Hours
Social change or social inequality selective	4	Capstone course	4
Advanced sociology elective	4	Public health core	4
HSCI 4700 (if student will complete an HSCI capstone)	0	Social change or social inequality selective	4
Open electives	8	Open electives	4
	16		16

Total Hours: 133

## Health Science and Psychology, BS

The combined Bachelor of Science degree program in health science and psychology is designed to provide an interdisciplinary approach to public health and psychology. Through interdisciplinary explorations, students have the opportunity to develop knowledge in health promotion and illness prevention by way of understanding people's behaviors, perceptions, and emotions within the contexts of relationships and culture. This highly flexible curriculum is enhanced by experiential learning opportunities and prepares students to practice in interdisciplinary settings and be successful in sustaining and promoting health across populations.

### Program Requirements

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

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

### Supporting Courses for Health Science

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3458	Biological Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Complete two of the following:		
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Complete one of the following:		
PSYC 3450	Learning and Motivation	4
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Electives</b>		
Complete 12 semester hours from the following subject area:		12

PSYC

Psychology Lab		Hours
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	

Psychology Seminar		Hours
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

**Supporting Courses**

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following		1
HSCI 1000	College: An Introduction	
PSYC 1000	Psychology at Northeastern	
<b>First-Year Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Co-op Preparation</b>		
Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESC 2000	Professional Development for Co-op	
<b>Math</b>		
MATH 1241	Calculus 1	4
<b>Advanced Writing in the Discipline</b>		
ENGW 3306	Advanced Writing in the Health Professions	4
<b>Ethical Reasoning</b>		
PHIL 1165	Moral and Social Problems in Healthcare	4
<b>Open Electives</b>		
Complete 28 semester hours of general electives.		28

**Integrative Requirement**

Code	Title	Hours
PSYC 3510	Brain, Behavior, and Immunity	4
or PSYC 4514	Clinical Neuroscience	
or CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Psychology GPA Requirement**

A grade of C or higher is required for all PSYC courses.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Four Years, One Co-op Plan**

Year 1							
Fall	Hours	Spring	Hours				
HSCI 1000 or PSYC 1000	1	BIOL 1113	4				
PHTH 1260 or 1261	4	BIOL 1114	1				
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1112	1	ENGW 1111	4				
MATH 1241	4	Elective	4				
PSYC 1101	4						
		18	18				
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours		
PSYC 2320	4	Public health core	4	Psychology elective	4		
Area A course	4	Public health core	4	Area B course	4		
Public health core	4	Area A course	4				
PSYC 3458	4	Psychology elective	4				
		16	16	8			
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESC 2000	1	Co-op		Co-op		ENGW 3306	4
Psychology lab	4					PHTH 4540	4
PHIL 1165	4						
Open electives	8						
		17	0	0	8		

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	Psychology seminar	4
Psychology elective	4	PSYC 3510, 4514, or CAEP 2012	4
Open electives	8	Open electives	8
16		16	

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Bouvé)****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1000 or HSCI 1000	1	PSYC Area A selective	4	PSYC Area B selective	4	Open electives	8
PHTH 1260 or 1261	4	BIOL 1113	4	public health core	4		
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1112	1	BIOL 1114	1				
MATH 1241	4	ENGW 1111	4				
PSYC 1101	4						
18		18		8		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Co-op		Co-op		PHIL 1165	4
Public health core	4					ENGW 3306	4
PSYC 3458	4						
Public health core	4						
HSCI 2000 or EESC 2000	1						
17		0		0		8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	Co-op		Co-op		Open electives	8
PSYC Area A selective	4						
PSYC elective	4						
Open elective	4						
16		0		0		8	

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	PSYC 3510, 4514, or CAEP 2012	4
PSYC lab	4	Psychology seminar	4

PSYCH elective	4	PSYC elective	4
Open elective	4	Open Elective	4
16		16	

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Science)****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1000 or HSCI 1000	1	PSYC Area A selective	4	PSYC Area B selective	4	Open electives	8
PHTH 1260 or 1261	4	BIOL 1113	4	public health core	4		
BIOL 1111	4	BIOL 1114	1				
BIOL 1112	1	ENGW 1111	4				
MATH 1241	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
PSYC 1101	4						
18		18		8		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Public health core	4	PSYC elective	4	Co-op	
Public health core	4	Public health core	4	Open elective	4		
PSYC 3458	4	PSYC Area A selective	4				
PHIL 1165	4	PSYC elective	4				
		EESC 2000 or HSCI 2000	1				
16		17		8		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Public health core	4	Open electives	4	Co-op	8
		PSYC lab	4				
		ENGW 3306	4				
		PSYC 3510, 4514, or CAEP 2012	4				
0		16		8		0	

**Year 4**

Fall	Hours	Spring	Hours
Co-op		Psychology seminar	4
		PSYC elective	4
		Open electives	8
0		16	

Total Hours: 133

## Environmental Engineering and Health Science, BSEnvE

This intercollege combined major is designed for students who would like to explore their interest in the health sciences while earning the benefit of a Bachelor of Science degree in environmental engineering. The combined major reflects the respective departmental thrusts in environmental health and sustainable resource engineering to create awareness about the complex relationship between the environment and human health, prepare professionals in this growing area capable of providing engineering solutions to current and emerging topics related to environmental engineering and health sciences, and maintain healthy environmental systems by applying and developing techniques to reduce exposure to health hazards. This program combines the content of two majors to allow students to learn the breadth and depth of the convergence between public health and environmental engineering.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
CIVE 2221 and CIVE 2222	Statics and Solid Mechanics and Recitation for CIVE 2221	4
CIVE 2260 and CIVE 2261	Materials for the Built Environment and Lab for CIVE 2260	5
CIVE 2331	Fluid Mechanics and Hydraulics	4
CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	4
CIVE 3435	Environmental Pollution Fate and Transport	4
CIVE 4534 and CIVE 4535	Water Treatment Systems Design and Lab for CIVE 4534	4
CIVE 4765	Senior Design Project—Environmental	5
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	4
GE 3300	Energy Systems: Science, Technology, and Sustainability	4
<b>Environmental Engineering Technical Electives</b>		
Complete three of the following:		11-12
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4566	Design for Sustainable Transportation: Netherlands	
CIVE 4575	Construction Management	

CIVE 4777	Climate Hazards and Resilient Cities Abroad
CIVE 4778	Climate Adaptation and Policy Abroad
CIVE 5260	Environmental Fluid Mechanics
CIVE 5271	Solid and Hazardous Waste Management
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure
CIVE 5280	Remote Sensing of the Environment
CIVE 5281	Coastal Dynamics and Design
CIVE 5363	Climate Science, Engineering Adaptation, and Policy
CIVE 5536	Hydrologic and Hydraulic Design

### Supplemental Credit

1 semester hour from the following course counts toward the engineering requirement:	1
CIVE 3464	Probability and Engineering Economy for Civil Engineering
3 semester hours from the following course count toward the engineering requirement:	3
CIVE 2335	Environmental Engineering Chemistry
3 semester hours from the following course count toward the engineering requirement:	3
CIVE 3430	Engineering Microbiology and Ecology
2 semester hours from the following course count toward the engineering requirement:	2
GE 1501	Cornerstone of Engineering 1
3 semester hours from the following course count toward the engineering requirement:	3
GE 1502	Cornerstone of Engineering 2

### Supporting Courses: Mathematics/Science

Complete all Mathematics/Science courses with a minimum of 30 semester hours.<sup>1</sup>

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5

### Science Elective (Earth)

Complete one of the following:		4-5
ENVR 1120	Oceans and Coasts	
ENVR 1200	Dynamic Earth	
ENVR 2200	Earth's Changing Cycles	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5201	Geologic Field Seminar	



**Supplemental Credit**

3 semester hours from the following course count toward the mathematics/science requirement: 3

CIVE 3464 Probability and Engineering Economy for Civil Engineering

1 semester hour from the following course counts toward the mathematics/science requirement: 1

CIVE 2335 Environmental Engineering Chemistry

1 semester hour from the following course counts toward the mathematics/science requirement: 1

CIVE 3430 Engineering Microbiology and Ecology

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

**Professional Development**

Code	Title	Hours
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**Professional Development**

GE 1000	Introduction to the Study of Engineering	1
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ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2

**Health Sciences Major Requirement**

Code	Title	Hours
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HLTH 5450	Healthcare Research (Principles of Epidemiology in Medicine and Public Health)	4
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or PHTH 4202 Principles of Epidemiology in Medicine and Public Health

PHTH 1260	The American Healthcare System	4
or PHTH 1261	Comparative Healthcare Systems	

PHTH 2210	Foundations of Biostatistics	4
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PHTH 2350	Community and Public Health	4
or PHTH 2351	Community and Public Health - Global	

PHTH 2414	Environmental Health	4
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PHTH 2515	Healthcare Policy and Administration	4
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PHTH 4120	Global Perspectives on Discrimination and Health	4
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PHTH 4540	Health Education and Program Planning	4
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PHTH 5214	Environmental Health	3
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**Writing Requirements**

Code	Title	Hours
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**Writing**

A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
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ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
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**Integrative Course**

Code	Title	Hours
CIVE 4765	Senior Design Project—Environmental	5

**Engineering GPA Requirement**

A minimum 2.000 GPA is required in major (CIVE) courses

**Health Sciences Major Requirement**

A minimum grade of C or higher is required for all HLTH and PHTH courses

**Program Requirement**

144 total semester hours required

**Note:**

<sup>1</sup> Mathematics/Science Requirement: CHEM 1151, MATH 1341, and PHYS 1151 require a grade of C- or higher

**Plan of Study****FOUR YEARS, 1 CO-OP SUMMER 2/FALL****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	PHTH 1260 (SI)	4		
ENGW 1111 (WF)	4	PHTH 2210 (FQ, AD)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2331	4	MATH 2341	4	Co-op	0
CIVE 2222	0	CIVE 2335	4	PHTH 2350 (SI)	4		
CIVE 2260	4	CIVE 3430	4				
CIVE 2261 (AD)	1	ENCP 2000	1				
CIVE 2334	4	PHTH 2414	4				
PHTH 2515	4						
	17		17		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 3435	4	GE 3300	4	Vacation	0
ENGW 3302 or 3315 (to be taken online) (WD)	4	HLTH 5450 or PHTH 4202 (ND, WI)	4	Science Elective (Earth)	4		

PHTH 4120 (IC, DD)	4			
Civil Tech. Elective	4			
	4	16	8	0

**Year 4**

Fall	Hours	Spring	Hours
CIVE 4534 (WI)	3	CIVE 3464	4
CIVE 4535	1	CIVE 4765 (EI, WI, CE)	5
ENCP 3000	1	CIVE 5300	2
PHTH 4540 (WI)	4	CIVE 5301	2
Civil Tech. Elective	4	PHTH 5214	3
Civil Tech. Elective	3		
	16		16

Total Hours: 144

**FIVE YEARS, 3 CO-OPS SUMMER 2/FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	MATH 2321 (FQ)	4	Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4	PHTH 1260 (SI)	4		
ENGW 1111 (WF)	4	PHTH 2210 (FQ, AD)	4				
GE 1000	1	PHYS 1151 (ND)	3				
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CIVE 2221	4	CIVE 2331	4	MATH 2341	4	Co-op	
CIVE 2222	0	CIVE 2335	4	PHTH 2350 (SI)	4		
CIVE 2260	4	CIVE 3430	4				
CIVE 2261 (AD)	1	ENCP 2000	1				
CIVE 2334	4	PHTH 2414	4				
PHTH 2515	4						
	17		17		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 3435	4	GE 3300	4	Co-op	
		HLTH 5450 or PHTH 4202 (ND, WI)	4	Science Elective (Earth)	4		
		PHTH 4120	4				

Civil Tech. Elective	4			
	0	16	8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CIVE 3464	4	Vacation		Co-op	
ENGW 3302 or 3315 (to be taken online) (WD)	4	CIVE 4534 (WI)	3				
		CIVE 4535	1				
		ENCP 3000	1				
		PHTH 4540 (WI)	4				
		Civil Tech. Elective	3				
	4		16		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		CIVE 5300	2
		CIVE 5301	2
		CIVE 4765 (EI, WI, CE)	5
		PHTH 5214	3
		Civil Tech. Elective	4
	0		16

Total Hours: 144

**Exercise Science, Minor**

The minor in exercise science is for undergraduate students from any discipline wishing to expand their understanding in this area. Exercise science is a discipline that examines the short- and long-term responses to exercise and benefits of exercise training for healthy persons, as well as persons with chronic diseases such as heart disease, pulmonary diseases, diabetes, and obesity. Through this minor, undergraduate students have an opportunity to broaden their understanding of exercise and physical activity in health promotion, disease prevention, and interventions. Students who elect a minor in exercise science may then apply to the Master of Science in Exercise Science upon graduation.

**Minor Requirements**

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

**Exercise Science Requirements**

A minimum grade of C is required in all courses taken toward the minor.

**Required Courses**

Code	Title	Hours
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
EXSC 4500 and EXSC 4501	Exercise Physiology 1 and Lab for EXSC 4500	5

EXSC 5200	Cardiopulmonary Physiology	3
EXSC 5220	Advanced Exercise Physiology	3

## GPA Requirement

2.000 GPA required in the minor

### Global Health, Minor

The area of global health has become a critical field of study across and within diverse disciplines, because of the cross-border and cross-national implications of health-related risks for national security, commerce, transportation, and healthcare delivery itself. In collaboration with the College of Social Sciences and Humanities, the minor in global health is designed to provide undergraduate students an opportunity to explore and discuss the implications with an interdisciplinary lens. The minor is comprised of five courses: 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:		4
PHTH 2350	Community and Public Health	
or PHTH 2351	Community and Public Health - Global	
AFRS 1270	Introduction to Global Health	
or PHTH 1270	Introduction to Global Health	

## Core Courses

Code	Title	Hours
Complete one of the following. If additional courses are taken, they may be used as electives.		
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	4
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5202	Introduction to Epidemiology	
PHTH 5230	Global Health	

## Elective Courses

Code	Title	Hours
Complete three courses from the following areas. Only two courses from any one area may count toward the minor electives. No more than two required courses in the student's major may count toward the minor electives. At least one of the minor electives must be at the 3000-level or above.		
<b>Area 1: Community and Public Health</b>		
AFRS 4939	Community Health, Culture, and Development in Kenya <small>(Dialogue Only)</small>	12
PHTH 1261	Comparative Healthcare Systems <small>(Dialogue only)</small>	

PHTH 2301	Communication Skills for the Health Professions—Global <small>(Dialogue Only)</small>
PHTH 4540	Health Education and Program Planning

### Area 2: Biology of Health and Disease

BIOL 1141	Microbes and Society
ENVR 1110	Global Climate Change

### Area 3: Society and Cultural Health / Area Studies

ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India
ECON 1230	Healthcare and Medical Economics
LACS 1220	Latino, Latin American, and Caribbean Studies
PHIL 1165	Moral and Social Problems in Healthcare

### Area 4: Globalization and Development

CRIM 1400	Human Trafficking
ECON 1291	Development Economics
HLTH 1510	Introduction to Healthcare Ethics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations

## Global Health Experience

Complete a global health experience that has been approved by the global health minor advisor.

## Recommended

Competency in another language other than English is recommended.

## 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
<b>Introductory Course</b>		
INSH 1300	Introduction to Health and Humanities	4
<b>Humanities Requirement</b>		
Complete two of the following:		8
ENGL 2770	Writing to Heal	
ENGL 3700	Narrative Medicine	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 4710	Capstone Seminar	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1295	Religious Perspectives on Health and Healing	
WMNS 1225	Gender, Race, and Medicine	
<b>Social Sciences Requirement</b>		
Complete two of the following:		8
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4580	Special Topics in Anthropology	
ECON 1230	Healthcare and Medical Economics	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
PHTH/SOCL 1120	Society and Health	
PHTH 1270	Introduction to Global Health	
PHTH 2300	Communication Skills for the Health Professions	
or PHTH 2301	Communication Skills for the Health Professions—Global	
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 5202	Introduction to Epidemiology	
PHTH 5234	Economic Perspectives on Health Policy	
SOCL 1295	Drugs and Society	
SOCL 2303	Gender and Reproductive Justice	
SOCL 3441	Sociology of Health and Illness	

## GPA Requirement

2.000 GPA required in the minor

## Health Research Methods, Minor

The health research methods minor is for undergraduate students from any major in any college at the university who have an interest in developing health-research-related skills. This minor creates an opportunity for students to develop marketable, applied skills and seeks to benefit students pursuing positions within research groups, as well as students pursuing advanced degrees.

**Admissions requirements:** Approval of the student's unit or college advisor and approval of the health research methods minor advisor are required for admission into the minor. Applicants are required to have an overall grade-point average of 3.000 or higher.

**Completion of minor:** Students must successfully complete the four required courses (12–14 credit hours) and human research ethics training, as well as a combination of electives totaling 6–8 credit hours, with a grade of C or better. Courses may not be taken pass/fail for fulfillment of the minor. Up to 8 credits of completed course work from the student's major program of study may be applied to fulfillment of requirements of 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
PHTH 2210	Foundations of Biostatistics	3-4
or NRSR 5120	Statistics for Health Science	
PHTH 3210	Using Data in Health Research	2
PHTH 3250	Fundamentals of Qualitative Research	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	3-4
or PHMD 3450	Research Methodology and Biostatistics	
or HLTH 5450	Healthcare Research	
PHTH 2949	Research Ethics Training	0

## Elective Courses

Code	Title	Hours
Complete 6–8 credits from the following:		
ANTH 3410	Ethnographic Field Experience	4
ECON 2560	Applied Econometrics	4
HLTH 3001	The Research Process	2
HLTH 4992	Directed Study	1-4
or HLTH 4991	Research	
IS 4800	Empirical Research Methods	4
PHMD 5223	Evidence-Based Medicine	2
PHSC 2400	Research Ethics for Beginning Health Scientists	4
PHTH 5320	Grant Writing in Public Health	1
PHTH 5330	Using Publicly Available Data in Public Health	1
PHTH 5340	Writing for Peer-Reviewed Journals in Public Health	1

PHTH 5440	Community-Based Participatory Research: Environmental Health	3
PHTH 5350	Using SAS in Public Health Research	1

### 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 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 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4

### Elective Courses

Code	Title	Hours
Complete three of the following:		9-12
EXSC 1120	Introduction to Exercise, Fitness, and Health	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
HLTH 5450	Healthcare Research	
HSCI 1105 or HSCI 1107	Human Nutrition Nutrition Service Learning	
HSCI 1106	Contemporary Issues in Nutrition	
HSCI 5230	Clinical Nutrition Applications in Health and Disease	
PHTH 1120	Society and Health	
PHTH 1270	Introduction to Global Health	
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	
PHTH 2414	Environmental Health	
PHTH 2515	Healthcare Policy and Administration	
PHTH 3250	Fundamentals of Qualitative Research	
PHTH 4120	Global Perspectives on Discrimination and Health	
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	
PHTH 4511	Healthcare Management	
PHTH 4515	Critical Issues in Health and Public-Health Policy	

PHTH 4540	Health Education and Program Planning
PHTH 5202	Introduction to Epidemiology
PHTH 5222	Health Advocacy
PHTH 5226	Strategic Management and Leadership in Healthcare
PHTH 5230	Global Health
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy
PHTH 5440	Community-Based Participatory Research: Environmental Health

### GPA Requirement

2.000 GPA required in the minor

### Healthcare System Operations, Minor

The objective of the minor in healthcare system operations is to prepare students to apply industrial and systems engineering methods in healthcare applications. Distinct from other service industries, healthcare systems are characterized by extensive complexities driven by communication between and interdependencies among multiple actors, and the need to simultaneously address multiple competing objectives pertaining to economic, quality-driven, individual-driven, and population-driven goals. This minor will benefit students by highlighting the unique features of this industry and methods for addressing its unique challenges to engineer improvements to the design, operation, and management of healthcare systems.

### Minor Requirements

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

### Required Courses

At most, one course from the minor may be counted toward major requirements.

Code	Title	Hours
<b>Required Courses</b>		
IE 5617	Lean Concepts and Applications	4
IE 5400 or IE 3500	Healthcare Systems Modeling and Analysis Introduction to Healthcare Systems Engineering	4
PHTH 1260	The American Healthcare System	4
<b>Electives</b>		
Complete one of the following: 4		
IE 5374	Special Topics in Industrial Engineering (System Dynamics in Healthcare)	
IE 5500	Systems Engineering in Public Programs	
IE 5640	Data Mining for Engineering Applications	
NRSG 5121	Epidemiology and Population Health	
PHTH 4511	Healthcare Management	
PHTH 5226	Strategic Management and Leadership in Healthcare	
PHTH 5232	Evaluating Healthcare Quality	

SCHM 3315 Managing Healthcare Operations and Supply Chain

### GPA Requirement

2.000 GPA required in the minor

### 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) or Nutrition Service Learning (HSCI 1107) 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 or HSCI 1107	Human Nutrition Nutrition Service Learning	4
HSCI 2350	Advanced Nutrition in Health and Disease	4
HSCI 2500	Public Health Nutrition in the Community	4

### Supporting Courses

Code	Title	Hours
Complete two of the following. At least one elective must be at the 3000 level or above:		
BIOL 3611 or PHSC 2320	Biochemistry Biochemistry	7-8
CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	
CAEP 3480	Counseling Theories and Practice	
COMM 3201	Health Communication	
ECON 3404	International Food Policy	
EXSC 1120	Introduction to Exercise, Fitness, and Health	
HSCI 1106	Contemporary Issues in Nutrition	
PHSC 4340	Pharmacology for the Health Professions	
PHSC 4502	Pharmacology/Medicinal Chemistry 2	
PPUA 5270	Food Systems and Public Policy	
PSYC 2306	Food, Behavior, and Eating Disorders	

### GPA Requirement

2.000 GPA required in the minor

### Public Health, Minor

The minor in public health is designed for undergraduate students from a variety of disciplines who wish to explore key components of public health including the basic components of the U.S. healthcare system, core values and concepts of public health, public health analytic methods, and the social determinants of health. The minor is comprised of five courses for a minimum of 18 semester hours. The four required courses focus on the key components of public health and the remaining course is an elective from the provided list. Through the elective course, students can explore policy, healthcare management and delivery, research methods, health communication, nutrition and exercise, health disparities, and environmental health.

### Minor Requirements

Note: This minor is not open to students majoring in the Bachelor of Science in Health Science or those pursuing a combined major with health science.

Code	Title	Hours	
<b>Required Courses</b>			
PTH 1260 or PTH 1261	The American Healthcare System Comparative Healthcare Systems	4	
PTH 2350 or PTH 2351	Community and Public Health Community and Public Health - Global	4	
PTH 2210 or ECON 2350 or ENVR 2500 or MATH 2280 or MATH 3081 or MGSC 2301 or PHMD 3450 or PSYC 2320	Foundations of Biostatistics Statistics Biostatistics Statistics and Software Probability and Statistics Business Statistics Research Methodology and Biostatistics Statistics in Psychological Research	4	
PTH 4202	Principles of Epidemiology in Medicine and Public Health	4	
<b>Elective</b>			
Complete one course from the lists below:		3-4	
<i>Nutrition and Wellness</i>			
EXSC 1120	Introduction to Exercise, Fitness, and Health		
HSCI 1105 or HSCI 1106 or HSCI 1107	Human Nutrition Contemporary Issues in Nutrition Nutrition Service Learning		
PTH 2300 or PTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global		
PTH 4540	Health Education and Program Planning		
<i>Policy and Administration</i>			
PTH 2515	Healthcare Policy and Administration		
PTH 4511	Healthcare Management		
PTH 4515	Critical Issues in Health and Public-Health Policy		
<i>Society and Health</i>			
PTH 1120 or SOCL 1120	Society and Health Society and Health		



PHTH 1270	Introduction to Global Health
PHTH 2414	Environmental Health
PHTH 4120	Global Perspectives on Discrimination and Health
<i>Research Methods</i>	
PHTH 3250	Fundamentals of Qualitative Research
PHTH 5440	Community-Based Participatory Research: Environmental Health

## GPA Requirement

2.000 GPA required in the minor

## School of Nursing

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

### Maria van Pelt, CRNA, PhD, FAAN

Dean and Associate Clinical Professor, School of Nursing  
Associate Dean, Bouvé College of Health Sciences

### Brenda Douglas, PhD, RN, CNE

Associate Clinical Professor and Assistant Dean of Undergraduate Programs

### Janet S. Rico, PhD, MBA, FNP

Associate Clinical Professor and Assistant Dean for Graduate Education

#### Office of the Dean

102 Robinson Hall  
617.373.3649  
617.373.8675 (fax)

#### Undergraduate Program Office

211 Robinson Hall  
617.373.2480

The School of Nursing offers a traditional Bachelor of Science, an Accelerated Bachelor of Science, and a Direct Entry (BSN) to Master's (MSN) for second-degree students in nursing designed to prepare students to become professional nurses by providing them with the knowledge, skills, and professional values needed for successful practice in a variety of healthcare settings. The school aims to provide all students—including those with diverse backgrounds and changing career goals—with a broad-based education that will foster ongoing personal and professional growth.

The mission of the Northeastern University School of Nursing is to educate students to provide evidence-based, culturally and linguistically competent, ethical healthcare that is high quality, safe, and accessible to diverse local, national, and global communities. Our programs seek to prepare students to become leaders as nurse clinicians, educators, scholars, and researchers.

Nursing is both a science-based profession and a caring art. The curriculum draws on basic and behavioral sciences, the arts and humanities, and the art and science of nursing to help students understand the complexities of health and illness across the life span.

### CLINICAL SETTINGS

Clinical settings require student criminal background checks. Additionally, international students require curricular practical training (CPT) clearance to meet federal requirements for all clinical and co-op experiences. Please see Requirements for Clinical, Internships, and Practicum Courses (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>) and Background Checks ([\[policies-procedures/background-checks/\]\(http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/background-checks/\)\) in this catalog for further details.](http://catalog.northeastern.edu/graduate/health-sciences/academic-</a></p>
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### ACCREDITATION

The baccalaureate degree program in nursing at Northeastern University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791, and is approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts and the state of North Carolina. Accreditation and approval indicate that the program meets educational standards for faculty, curriculum design, student quality, and overall university support.

## Programs

### Bachelor of Science in Nursing (BSN)

- Nursing (p. 540)
- Nursing—Accelerated Program for Second-Degree Students (p. 547)

## Minors

- Wellness Studies (p. 550)

## Nursing, BSN

The goal of the School of Nursing is to prepare students to think critically and to practice nursing competently and compassionately in rapidly changing practice environments. All efforts are designed to build nursing knowledge; enhance nursing practice and patient safety; foster professional integrity; and ultimately improve the health outcomes of patients, families, and communities across the continuum of care. This approach requires knowledge, skills, and attitudes that demonstrate leadership, quality care, critical thinking and clinical reasoning, cultural and linguistic competence, interprofessional collaboration, evidence-based practice, and integration of informatics and technology.

The clinical program takes place in the community where people live, as well as in hospitals, rehabilitation centers, and long-term-care facilities. The curriculum is capped by courses that enable students to put leadership and management skills into action and to synthesize the complete role of the professional nurse in a clinical practicum.

In addition to completing academic 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 baccalaureate degree program in nursing at Northeastern University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791, and is also approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts. Accreditation and approval indicate that the program meets educational standards for faculty, curriculum design, student quality, and overall university support.

The school subscribes to the standards established by the American Association of Colleges of Nursing (AACN), of which it is a member.

## Academic Standards for Nursing Majors

Minimum passing grade standards exist for both professional courses, which are required courses taught within the major/college, and professional prerequisite courses, as highlighted below:

- Professional Course with a prefix HLTH, HSCI and NRSR require a minimum passing grade of C.
- Professional pre-requisite courses with a prefix BIOL, CHEM, MATH and PSYC require a minimum passing grade of C.

Courses in the above listed professional or professional prerequisite subjects that are taken as electives are exempt from the C or better rule and the University's minimum satisfactory grade will be accepted.

### For all other courses:

The University's minimum passing grade for the course will be accepted. Please note: The University requires a minimum grade of C for ENGW 1111 and ENGW 3306.

## PROGRESSION WITHIN NURSING

- First-year students must complete at least 27 semester hours and meet all major prerequisite course requirements to progress to sophomore status. First-year students who earn fewer than the semester hours stipulated by the curriculum plan for their major must make up the difference prior to graduation.
- To progress into the subsequent year of professional courses, students must have completed all professional prerequisites with the required minimum passing grade as noted in the chart.
- Students must successfully complete all courses, as stipulated by their approved curriculum plan, with a grade of C or better, in order to progress into the next professional course.
- Students who either fail or withdraw from a professional course will need to successfully remediate that course before continuing in their approved curriculum plan.
- Students who incur an incomplete grade in a prerequisite course must obtain approval from their academic advisor, upon consultation with the department faculty and, when appropriate, the School of Nursing Academic Standing Committee, prior to progression into the subsequent course(s).
- Students may not change their graduation date more than twice.

## ACADEMIC DISMISSAL FROM MAJOR

Students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Students who do not meet the required minimum grade in two professional courses, including labs and clinical, will be dismissed from the program. Only one professional course can be remediated.
- Remediation of a failed professional course is a requirement for progression in the program.
- Students who do not meet the minimum grade in the same course twice will be dismissed from the program.
- If a student fails a second professional course, dismissal for failure of two professional courses will take effect.

*Note:* Students dismissed from their major but who are otherwise in good standing with the University are allowed to remain at Northeastern University for up to two semesters as a provisional Bouvé student, by the end of which the student is expected to move into a new major.

## ACADEMIC APPEALS

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Additional details about the process may be found in the Bouvé College Academic Affairs Appeals Policy (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/appeals-process/>) and in *Appeals Policies and Procedures* in the university Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>).

## Program Policies & Standards

Students are expected to adhere to the policies and standards of their program major as stated in this Manual to progress through their curriculum as planned. Students seeking any exceptions to the Program Policies and Standards specified for their program major will be brought before the School of Nursing Academic Standing Committee to present their petitions.

## BACHELOR OF SCIENCE IN NURSING PROGRAM REQUIREMENTS

The nursing program includes two options for entering freshmen:

- A 5 year track with three, 6 month co-ops, and
- A 4 year track with two, 6 month co-ops.
- Students must declare by September 1 of their third year, either the 5 or 4 year track. Nursing students must complete a minimum of two, 6-month coops. At least one of the two must be working with registered nurses providing direct patient care.
- Students must complete all co-op experiences planned in their academic program with a grade of 'S' for each co-op experience.

Change-of-major students should access and follow the requirements found at the Office of Bouvé Undergraduate Student Services under Change of Major (<https://bouve.northeastern.edu/student-services/undergraduate-change-of-major/>).

Students must successfully complete 133 semester hours of academic credit to graduate, in compliance with University and nursing curriculum requirements and their expected year of graduation.

- Degree requirements must be completed within eight years from the date of matriculation
- Students are required to attend all scheduled nursing classes, clinical experiences, and clinical labs on campus and in clinical agencies. If the student fails to meet attendance requirements, the student will fail the associated class, clinical and/or lab.

## CLINICAL REQUIREMENTS

Clinical settings require criminal background checks. Additionally, international students require curricular practical training (CPT) clearance to meet federal requirements for all clinical and co-op experiences.

All students must receive a health clearance from University Health and Counseling Services (UHCS). Health clearance is based on specific documentation of immunity from infectious disease and a physical examination (this may be done by the student's own healthcare provider). In addition, nursing students need a clinical clearance in order to participate in clinical courses. Clinical clearance, managed by the School of Nursing's Clinical Placement Office, includes verification of certification of *Healthcare Provider* cardiopulmonary resuscitation (CPR); recent negative tuberculosis screening (PPD); positive 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.

Six weeks prior to the start of a clinical course, students must show:

- Evidence of immunizations and health clearance by University Health and Counseling Services,
- Documentation of *Healthcare Provider* CPR certification and
- Completion of a Criminal Offender Record Information (CORI) background check to be eligible for clinical placement.
- Students will not be allowed to start the clinical course, and may be dropped from the clinical course, if these processes are not satisfactorily completed.

Students should refer to Clinical Course Requirements, Health Clearance Requirements for Clinical Rotations and the Professional Conduct statement here (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>) for additional details.

### CLINICAL WARNING

A nursing student may be placed on clinical warning, or fail the clinical course, at any time during the semester for the following reasons:

- Failing to meet the clinical objectives at a satisfactory level.
- Failing to demonstrate safe practice. Students may be removed from the clinical area, before completion of the clinical rotation, if the instructor determines that the student is unsafe. This will result in the student failing the clinical course.
- Failing to meet the attendance requirement.

### Conditions

- Students on clinical warning must develop an academic plan with the clinical instructor to address clinical performance.
- Students will be expected to improve clinical performance by adhering to the plan.
- Failure to adhere to the terms of the plan will result in the student failing the course and being placed on academic probation. All conditions of academic probation will then apply.

### Notification

- The clinical instructor will issue the student a Clinical Warning via the Faculty and Advisor Communication Tool (FACT) identifying the problem.
- The student and the instructor should then develop a plan together to address the deficiency.
- Copies of the warning will be forwarded to the Program Director and/or the Assistant Dean for Undergraduate programs if needed.
- This is an administrative warning and will not be posted on the transcript.
- Satisfactory completion of the clinical experience component of the course will result in removal of the warning from the student's file.

### BLOOD BORNE PATHOGEN EXPOSURE AND INJURY

Any students who sustain any kind of injury and/or exposure related to blood borne, respiratory or other pathogens or hazardous materials while on a clinical rotation must immediately follow the procedures below. Students are provided access to post-exposure counseling through the university's partner, OEHN (Occupational Environmental Health Network).

### Procedures

Students must follow the Affiliate site's protocol for exposure reporting, testing, counseling and follow up. If there is no affiliate site protocol, Students should notify their program as well as the

Office of Risk Services (<https://www.northeastern.edu/risk-services/>) ([risk@northeastern.edu](mailto:risk@northeastern.edu)).

Within 24 hours of the incident, Students must also inform their program's Director of Clinical Placement (or unit designee responsible for clinical placements) and/or Medical Director and submit, in writing, a description of the incident and injury or exposure.

The program's Director of Clinical Placement (or unit designee responsible for clinical placements) will notify the following individuals that an incident has occurred (PHI only necessary upon request):

- o The Associate Dean of Clinical, Rehabilitation and New Initiatives
- o The unit head
- o The Dean
- o The Office of Risk Services (<https://www.northeastern.edu/risk-services/>) ([risk@northeastern.edu](mailto:risk@northeastern.edu))

Students on or near the NU Boston campus are encouraged to schedule an appointment with UHCS to discuss the exposure, treatment, potential risks and side effects of any medications. Students in clinical programs outside the Boston area should contact the Occupational & Environmental Health Network (OEHN) at 1-866-360-8100. OEHN is open 24 hours a day, 7 days a week 365 days a year. OEHN will collect appropriate information and engage the doctor on call who can help to direct appropriate care depending on exposure and circumstances.

Students should rely on their health insurance for necessary treatment. Out of pocket costs may be submitted to the Office of Risk Services for reimbursement consideration.

Students should contact their Clinical Placement Director and/or the Office of Risk Services (<https://www.northeastern.edu/risk-services/>) with any further questions related to exposure-related treatment.

### Technical Standards for Admission, Academic Progression, and Graduation

The primary mission of the School of Nursing is to educate our students to provide evidence-based, culturally and linguistically competent, ethical healthcare that is high quality, safe, and accessible to diverse local, national and global communities. Our programs prepare students to become leaders as nurse clinicians, educators, scholars, and researchers. The School of Nursing is also committed to achieving the goals of the university to become an outstanding national research, practice-oriented, student-centered, urban institution.

The goal of the School of Nursing is to prepare students to think critically and to practice nursing competently and compassionately in rapidly changing practice environments. All efforts are designed to build nursing knowledge, enhance nursing practice and patient safety, foster professional integrity, and ultimately improve the health outcomes of patients, families, and communities across the continuum of care.

In addition to classroom learning, students' clinical education experiences occur in settings, like hospitals, in which patient safety is the priority. For this reason, students who, upon enrollment in any of the nursing programs, seek accommodations from the Disability Resource Center (DRC) at NU must also request an assessment of accommodations that would be needed for clinical education.

Certain functional abilities are essential for the delivery of safe, effective nursing care during clinical education activities. Therefore, the School of Nursing has determined that certain technical standards are requisite

for admission, progression, and graduation from the nursing programs. An individual must be able to independently, with or without reasonable accommodation, meet the following technical standards:

1. General abilities
2. Observation
3. Communication
4. Motor
5. Intellectual, conceptual, and quantitative abilities
6. Essential behavioral and social attributes
7. Ability to manage stressful situations

Individuals unable to meet these technical standards, with or without reasonable accommodation, will not be able to complete the program.

### GENERAL ABILITIES

The student is expected to possess functional use of the senses of vision, touch, hearing, and smell so that data received by the senses may be integrated, analyzed, and synthesized in a consistent and accurate manner. A student must be able to respond promptly to urgent situations that may occur during clinical training activities and must not hinder the ability of other members of the health care team to provide prompt treatment and care to patients.

### OBSERVATIONAL ABILITY

The student must have sufficient capacity to make accurate visual observations and interpret them in the context of laboratory studies, medication administration, and patient care activities. In addition, the student must be able to document these observations and maintain accurate records.

### COMMUNICATION ABILITY

The student must communicate both verbally and non-verbally in order to elicit information and to convey that information to others. Each student must have the ability to read and write accurately and comprehensively in English. The student must be able to thoroughly comprehend and fluently speak the English language so as to facilitate communication with patients, families, professionals in health care settings, instructors, and other students. The student must also be able to present information in a professional, logical manner and to provide counseling and instruction in order to effectively care for patients and their families.

### MOTOR ABILITY

The student must be able to perform gross and fine motor movements with sufficient coordination needed to perform complete physical examinations utilizing the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers. A student must develop the skills needed to perform or assist with procedures, treatments, administration of medication, and the management and operation of diagnostic and therapeutic medical equipment. The student possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving, and physical exertion required for satisfactory and safe performance in the clinical and classroom settings.

### INTELLECTUAL, CONCEPTUAL, AND QUANTITATIVE ABILITIES

The student must be able to develop and refine critical thinking skills that are essential to nursing practice. Critical thinking involves the abilities to measure, calculate, reason, analyze, and synthesize objective and subjective data, and to make decisions, often in a time-urgent environment, that reflect consistent and thoughtful deliberation and sound clinical judgment.

### BEHAVIORAL AND SOCIAL ATTRIBUTES

Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the nursing programs. The student must be able to work under supervision of a clinical instructor or preceptor; this is essential to ensure patient safety. The student must exercise good judgment and promptly complete all responsibilities in the classroom and clinical settings. The ability to establish culturally competent relationships with individuals, families, and groups and to respond effectively to patients who have different intellectual capacities is critical to nursing practice.

### EXAMINATIONS DISABILITY AND SPECIAL NEEDS

Students with special needs are encouraged to contact the Disability Resource Center (DRC) in 20 Dodge Hall to register and request services.

Students must notify the instructor at the beginning of the semester if they plan to use DRC services throughout the course. The staff in that office is available for assistance.

### ABILITY TO MANAGE STRESSFUL SITUATIONS

The student must be able to adapt to and function effectively in stressful situations in both the classroom and clinical settings, including emergency situations. These stressors include personal, patient care/family, faculty/peer, and or program related issues.

### State Board Nursing Examination

In Massachusetts, and several other states, the registering board requires that graduates taking the National Council Licensing Examination (NCLEX-RN) meet standards of "good moral character" (GMC).

Students may review the GMC requirement specified at Massachusetts General Laws Chapter 112, sections 74, 74A, and 76; Licensure Policy No. 00-01 under "Rules & Regulations" on the Massachusetts BORN website.

Please visit Bouvé College Learning Outcomes for the specific student learning outcomes for this program.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Nursing Major Requirements

Code	Title	Hours
NRSR 2150	Ethical Healthcare: Genetics and Genomics	4
or HLTH 2100	Interprofessional Ethics for Individual and Population Health	
or PHIL 1165	Moral and Social Problems in Healthcare	
NRSR 2210	Influences on Health and Illness: A Nursing Perspective	3
NRSR 2220 and NRSR 2221	Health Assessment and Fundamental Nursing Skills and Lab for NRSR 2220	4



NRSRG 2350	Integrated Pathophysiology and Pharmaceutical Interventions for Nursing Practice	6
NRSRG 3302 and NRSRG 3303	Nursing with Women and Families and Clinical for NRSRG 3302	5
NRSRG 3320 and NRSRG 3321	Nursing Care of Adults 1 and Clinical for NRSRG 3320	6
NRSRG 3323 and NRSRG 3324	Advanced Assessment and Interventions and Lab for NRSRG 3323	2
NRSRG 3400 and NRSRG 3401	Nursing and the Promotion of Mental Health and Clinical for NRSRG 3400	5
NRSRG 3420 and NRSRG 3421	Nursing Care of Adults 2 and Clinical for NRSRG 3420	6
NRSRG 4502 and NRSRG 4503	Nursing Care of the Child and Clinical for NRSRG 4502	6
NRSRG 4604 and NRSRG 4605	Public Health Community Nursing and Clinical for NRSRG 4604	5
NRSRG 4610	Managing and Leading in Healthcare	4
NRSRG 4995 and NRSRG 4996	Comprehensive Nursing Practicum and Clinical for NRSRG 4995	5
NRSRG 5120	Statistics for Health Science	3
HLTH 5450 or NRSRG 5220	Healthcare Research Introduction to Research Methods and Application for Healthcare	4

### Supporting Courses

Code	Title	Hours
<b>CORE TERM 1</b>		
NRSRG 1000	College: An Introduction	1
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
Please complete one of the following 2 lecture/lab pairs		
CHEM 1101 and CHEM 1102	General Chemistry for Health Sciences and Lab for CHEM 1101	5
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
HSCI 1105	Human Nutrition	4
Complete one of the following:		
MATH 1215	Mathematical Thinking	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1341	Calculus 1 for Science and Engineering	
<b>CORE TERM 2</b>		
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
PSYC 1101	Foundations of Psychology	4
BIOL 2221 and BIOL 2222	Foundations of Microbiology and Lab for BIOL 2221	5
ENGW 1111	First-Year Writing	4
<b>CLINICAL TERM 2</b>		
NRSRG 2000	Professional Development for Co-op	1

SOCL 1101	Introduction to Sociology	4
<b>CLINICAL TERM 3</b>		
PSYC 3404	Developmental Psychology	4
<b>CLINICAL TERM 4</b>		
<b>CLINICAL TERM 5</b>		
ENGW 3306	Advanced Writing in the Health Professions	4

### Electives

Code	Title	Hours
Complete four courses (for at least 15 credits) outside the School of Nursing or NRSRG courses not used to fulfill requirements above.		15

### NUPATH REQUIREMENTS SATISFIED

- Analyzing/Using Data (AD)
- Capstone Experience (CE)
- Engaging Difference/Diversity (DD)
- Exploring Creative Expression and Innovation (EI)
- Ethical Reasoning (ER)
- Integration Experience (IC)
- Conducting Formal/Quantitative Reasoning (FQ)
- Interpreting Culture (IC)
- Natural/Designed World (ND)
- Society/Institutions (SI)
- Writing Intensive in the Major (WI)
- Advanced Writing in the Disciplines (WD)

Integrating Knowledge and Skills Through Experience (EX) is satisfied through co-op.

Students are responsible for using the general electives in this program to complete NUPATH requirements not satisfied by required courses in this program.

### Program Requirements

133 total semester hours required

### Plan of Study

#### Sample Plans of Study

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSRG 1000	1	PSYC 1101 (ND) (SI)	4	NUterm (Optional)		Vacation	
Select ONE of the following CHEM course sequences:	5	BIOL 2219 and BIOL 2220	5	Elective		4	
CHEM 1101 and CHEM 1102 and CHEM 1103		BIOL 2221 and BIOL 2222	5	Elective		4	

CHEM 116 and CHEM 116 and CHEM 116	ENGW 1111	4		
BIOL 2217 and BIOL 2218		5		
MATH 1215 or 1241		4		
HSCI 1105		4		
		19	18	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSG 2000	1	Co-op 1		Co-op 1		NRSG 3302 and NRSG 3303	5
NRSG 2210 (DD) (EI)	3					PSYC 3404	4
NRSG 2220 and NRSG 2221	4						
NRSG 2350	6						
Elective	4						
	18		0		0		9

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSG 3320 and NRSG 3321	6	Co-op 2		Co-op 2		NRSG 2150, HLTH 2100, or PHIL 1165 (ER)	4
NRSG 3323 and NRSG 3324	2					HLTH 5450 or NRSG 5220 (ND) (FQ) (WI)	4
NRSG 3400 and NRSG 3401	5						
NRSG 5120 (AD) (FQ)	3						
Elective	3						
	19		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
SOCL 1101 (SI)	4	NRSG 4604 and NRSG 4605 (For NRSG 4604 (IC), For NRSG 4605 (EX))	5
NRSG 4502 and NRSG 4503	6	NRSG 4610 or 4611 (CE) (WI)	4
NRSG 3420 and NRSG 3421	6	NRSG 4995 and NRSG 4996	5

ENGW 3306 (WD)	4
16	18

Total Hours: 133

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSG 1000	1	PSYC 1101 (ND) (SI)	4	NUterm (Optional)		Vacation	

BIOL 2217 and BIOL 2218	5	BIOL 2219 and BIOL 2220	5	Elective	4
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Select ONE of the following CHEM course sequences:

CHEM 110 and CHEM 110 and CHEM 110	ENGW 1111	4
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CHEM 1161 and CHEM 1162 and CHEM 1163

HSCI 1105	4
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MATH 1215 or 1241	4
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19	18	8	0
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**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSG 2210 (DD) (EI)	3	NRSG 2000	1	NRSG 3400 and NRSG 3401	5	Co-op 1	0

NRSG 2220 and NRSG 2221	4	NRSG 3302 and NRSG 3303	5	PSYC 3404	4
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NRSG 2350	6	NRSG 3320 and NRSG 3321	6
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Elective	4	NRSG 3323 and NRSG 3324	2
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		SOCL 1101 (SI)	4
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17	18	9	0
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**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Coop 1		NRSG 3420 and NRSG 3421	6	ENGW 3306 (WD)	4	Co-op 2	



NRSRG 4502 and NRSRG 4503	6	NRSRG 4604 and NRSRG 4605 (For NRSRG 4604 (IC), For NRSRG 4605 (EX))	5
NRSRG 5120 (AD) (FQ)	3		
Elective	3		
	0	18	9
			0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op 2		NRSRG 2150, HLTH 2100, or PHIL 1165 (ER)	4		
		NRSRG 4610 or 4611 (CE) (WI)	4		
		NRSRG 4995 and NRSRG 4996	5		
		HLTH 5450 or NRSRG 5220 (FQ) (WI) (ND)	4		
	0		17		0

Total Hours: 133

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSRG 1000	1	ENGW 1111	4	NUterm (Optional)		Vacation	0
Select ONE of the following CHEM course sequences:	5	BIOL 2219 and BIOL 2220	5				
CHEM 1101 and CHEM 1102 and CHEM 1103		BIOL 2221 and BIOL 2222	5				
CHEM 116 and CHEM 116 and CHEM 116		PSYC 1101 (ND) (SI)	4				
BIOL 2217 and BIOL 2218	5						
HSCI 1105	4						
MATH 1215 or 1241	4						
	19		18		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSRG 2210 (EI) (DD)	3	NRSRG 2000	1	NRSRG 3400 and NRSRG 3401	5	Co-op 1	0
NRSRG 2220 and NRSRG 2221	4	NRSRG 3302 and NRSRG 3303	5	PSYC 3404	4		
NRSRG 2350	6	NRSRG 3320 and NRSRG 3321	6				
Elective	4	NRSRG 3323 and NRSRG 3324	2				
		SOCL 1101 (SI)	4				
	17		18		9		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op 1	0	ENGW 3306	4	Vacation		Co-op 2	0
		NRSRG 3420 and NRSRG 3421	6				
		NRSRG 4604 and NRSRG 4605 (For NRSRG 4604 (IC), For NRSRG 4605 (EX))	5				
		NRSRG 5120 (FQ) (AD)	3				
	0		18		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op 2		NRSRG 4502 and NRSRG 4503	6	Vacation		Co-op 3	
		HLTH 5450 or NRSRG 5220 (ND) (FQ) (WI)	4				
		Elective	4				
		Elective	3				
	0		17		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op 3		NRSRG 2150, HLTH 2100, or PHIL 1165 (ER)	4
		NRSRG 4610 or 4611 (CE) (WI)	4
		NRSRG 4995 and NRSRG 4996	5

Elective	4
0	17

Total Hours: 133

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSRG 1000	1	ENGW 1111	4	NU Term (optional)	0	Vacation	0
BIOL 2217 and BIOL 2218	5	BIOL 2219 and BIOL 2220	5				
Select ONE of the following CHEM course sequences:	5	BIOL 2221 and BIOL 2222	5				
CHEM 110 and CHEM 110 and CHEM 110		PSYC 1101 (ND) (SI)	4				
CHEM 1161 and CHEM 1162 and CHEM 1163							
MATH 1215 or 1241	4						
HSCI 1105	4						
	19		18		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSRG 2000	1	Co-op 1	0	Co-op 1	0	NRSRG 3302 and NRSRG 3303	5
NRSRG 2210 (EI) (DD)	3					PSYC 3404	4
NRSRG 2220 and NRSRG 2221	4						
NRSRG 2350	6						
Elective	4						
	18		0		0		9

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
NRSRG 3320 and NRSRG 3321	6	Co-op 2	0	Co-op 2	0	Vacation	
NRSRG 3323 and NRSRG 3324	2						
NRSRG 3400 and NRSRG 3401	5						
SOCL 1101 (SI)	4						
	17		0		0		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3306	4	Co-op 3	0	Co-op 3	0	Vacation	
NRSRG 3420 and NRSRG 3421	6						
NRSRG 5120 (FQ) (AD)	3						
NRSRG 2150, HLTH 2100, or PHIL 1165 (ER)	4						
	17		0		0		0

#### Year 5

Fall	Hours	Spring	Hours
NRSRG 4502 and NRSRG 4503	6	NRSRG 4604 and NRSRG 4605 (For NRSRG 4604 (IC), For NRSRG 4605 (EX))	5
HLTH 5450 or NRSRG 5220 (ND) (FQ) (WI)	4	NRSRG 4610 or 4611 (WI) (CE)	4
Elective	4	NRSRG 4995 and NRSRG 4996	5
Elective	3	Elective	4
	17		18

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 coursework and hands-on learning involving both clinical placements and experience in the skills laboratory. The program offers students an opportunity to work closely with nursing faculty to master the core skills necessary to excel in their nursing career. The program also seeks to prepare students to successfully take and pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN) and earn an RN license.

The ABSN curriculum includes 67 credits of undergraduate courses with online learning modules incorporating lectures and learning activities. The majority of these credits are completed online through an e-learning platform that allows students to listen to lectures, submit assignments, complete interactive learning modules, and engage in discussion with faculty and classmates.

The Bouvé College of Health Sciences School of Nursing has an extensive network of clinical affiliations at health centers, major teaching hospitals, and community hospitals that allow students to engage in clinical experiences covering a wide range of nursing specialties that include

adult health, maternal-newborn, pediatrics, behavioral and mental health, acute care, and public health.

The baccalaureate degree program in nursing at Northeastern University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791, and is also approved by the Board of Registration in Nursing of the Commonwealth of Massachusetts and by the North Carolina Board of Nursing. Accreditation and approval indicate that the program meets educational standards for faculty, curriculum design, student quality, and overall university support.

The school subscribes to the standards established by the American Association of Colleges of Nursing (AACN), of which it is a member.

## Academic Standards for Nursing Majors

### PROGRESSION WITHIN NURSING

- Students must successfully complete all courses, as stipulated by their curriculum plan, with a grade of C or better, in order to progress into the next professional course.
- Students who either fail or withdraw from a professional course will need to successfully remediate that course before continuing in their approved curriculum plan.
- Students who incur an incomplete grade in a prerequisite course must obtain approval from their academic adviser, upon consultation with the department faculty and, when appropriate, the School of Nursing Academic Standing Committee, prior to progression into the subsequent course(s).
- Students may not change their graduation date more than twice.

### Academic Dismissal from Major

Students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Students who do not meet the required minimum grade in two professional courses, including labs and clinical, will be dismissed from the program. Only one professional course can be remediated.
- Remediation of a failed professional course is a requirement for progression in the program.
- Students who do not meet the minimum grade in the same course twice will be dismissed from the program.
- If a student fails a second professional course, dismissal for failure of two professional courses will take effect.

### ACADEMIC APPEALS

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Additional details about the process may be found in the Bouvé College Academic Affairs Appeals Policy (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/appeals-process/>) and in *Appeals Policies and Procedures* in the university Undergraduate Student Handbook (<http://www.northeastern.edu/osccr/code-of-student-conduct/>).

## Program Policies and Standards

Students are expected to adhere to the policies and standards of their program major to progress through their curriculum as planned. Students seeking any exceptions to the program policies and standards specified for their program major will be brought before the School of Nursing Academic Standing Committee to present their petitions.

Students are required to attend all scheduled nursing classes, clinical experiences, and clinical labs on campus and in clinical agencies. If the student fails to meet attendance requirements, the student will fail the associated class, clinical, and/or lab.

Students enrolled in the clinical courses will need access to a car to travel to assigned agencies. Students are responsible for their own transportation costs.

### CLINICAL REQUIREMENTS

Clinical settings require criminal background checks. Additionally, international students require curricular practical training (CPT) clearance to meet federal requirements for all clinical and co-op experiences.

All students must receive a health clearance from University Health and Counseling Services (UHCS). Health clearance is based on specific documentation of immunity from infectious disease and a physical examination (this may be done by the student's own healthcare provider). In addition, nursing students need a clinical clearance in order to participate in clinical courses. Clinical clearance, managed by the School of Nursing's Clinical Placement Office, includes verification of certification of Healthcare Provider cardiopulmonary resuscitation (CPR); recent negative tuberculosis screening (PPD); positive 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.

Beginning six weeks prior to the start of a clinical course, students must show:

- Evidence of immunizations and health clearance by University Health and Counseling Services.
- Documentation of Healthcare Provider CPR certification.
- Completion of a Criminal Offender Record Information (CORI) background check to be eligible for clinical placement.
- Students will not be allowed to start the clinical course, and may be dropped from the clinical course, if these processes are not satisfactorily completed.

Students should refer to Clinical Course Requirements, Health Clearance Requirements for Clinical Rotations, and the Professional Conduct statement here (<http://catalog.northeastern.edu/graduate/health-sciences/academic-policies-procedures/practicum-internship-policies/>) for additional details.

### CLINICAL WARNING

A nursing student may be placed on clinical warning, or fail the clinical course, at any time during the semester for the following reasons:

- Failing to meet the clinical objectives at a satisfactory level.
- Failing to demonstrate safe practice. Students may be removed from the clinical area, before completion of the clinical rotation, if the instructor determines that the student is unsafe. This will result in the student failing the clinical course.
- Failing to meet the attendance requirement.

### Conditions

- Students on clinical warning must develop an academic plan with the clinical instructor to address clinical performance.

- Students will be expected to improve clinical performance by adhering to the plan.
- Failure to adhere to the terms of the plan will result in the student failing the course and being placed on academic probation. All conditions of academic probation will then apply.

### **Notification**

- The clinical instructor will issue the student a clinical warning via the Faculty and Advisor Communication Tool (FACT) identifying the problem.
- The student and the instructor should then develop a plan together to address the deficiency.
- Copies of the warning will be forwarded to the program director and/or the assistant dean for undergraduate programs if needed.
- This is an administrative warning and will not be posted on the transcript.
- Satisfactory completion of the clinical experience component of the course will result in removal of the warning from the student's file.

### **BLOOD-BORNE PATHOGEN EXPOSURE AND INJURY**

Any students who sustain any kind of injury and/or exposure related to blood-borne, respiratory, or other pathogens or hazardous materials while on a clinical rotation must immediately follow the procedures below. Students are provided access to postexposure counseling through the university's partner, OEHN (Occupational & Environmental Health Network).

### **Procedures**

Students must follow the affiliate site's protocol for exposure reporting, testing, counseling, and follow-up. If there is no affiliate site protocol, students should notify their program as well as the Office of Risk Services (<https://www.northeastern.edu/risk-services/>) ([risk@northeastern.edu](mailto:risk@northeastern.edu)).

Within 24 hours of the incident, the student must also inform his or her program's director of clinical placement (or unit designee responsible for clinical placements) and/or medical director and submit, in writing, a description of the incident and injury or exposure.

The program's director of clinical placement (or unit designee responsible for clinical placements) will notify the following individuals that an incident has occurred (PHI only necessary upon request):

- The associate dean of clinical, rehabilitation, and new initiatives
- The unit head
- The dean
- The Office of Risk Services (<https://www.northeastern.edu/risk-services/>) ([risk@northeastern.edu](mailto:risk@northeastern.edu))

Students on or near the NU Boston campus are encouraged to schedule an appointment with UHCS to discuss the exposure, treatment, potential risks, and side effects of any medications. Students in clinical programs outside the Boston area should contact OEHN at 1-866-360-8100. OEHN is open 24 hours a day, 7 days a week, 365 days a year. OEHN will collect appropriate information and engage the doctor on call who can help to direct appropriate care depending on exposure and circumstances.

Students should rely on their health insurance for necessary treatment. Out-of-pocket costs may be submitted to the Office of Risk Services for reimbursement consideration.

Students should contact their clinical placement director and/or the Office of Risk Services (<https://www.northeastern.edu/risk-services/>) with any further questions related to exposure-related treatment.

## **Technical Standards for Admission, Academic Progression, and Graduation**

The primary mission of the School of Nursing is to educate our students to provide evidence-based, culturally and linguistically competent, ethical healthcare that is high quality, safe, and accessible to diverse local, national, and global communities. Our programs are designed to prepare students to become leaders as nurse clinicians, educators, scholars, and researchers. The School of Nursing is also committed to achieving the goals of the university to become an outstanding national research, practice-oriented, student-centered, urban institution.

The goal of the School of Nursing is to prepare students to think critically and to practice nursing competently and compassionately in rapidly changing practice environments. All efforts are designed to build nursing knowledge, enhance nursing practice and patient safety, foster professional integrity, and ultimately improve the health outcomes of patients, families, and communities across the continuum of care.

In addition to classroom learning, students' clinical education experiences occur in settings, like hospitals, in which patient safety is the priority. For this reason, students who, upon enrollment in any of the nursing programs, seek accommodations from the Disability Resource Center (DRC) at NU must also request an assessment of accommodations that would be needed for clinical education.

Certain functional abilities are essential for the delivery of safe, effective nursing care during clinical education activities. Therefore, the School of Nursing has determined that certain technical standards are requisite for admission, progression, and graduation from the nursing programs. An individual must be able to independently, with or without reasonable accommodation, meet the following technical standards:

1. General abilities (p. 549)
2. Observation (p. 549)
3. Communication (p. 549)
4. Motor (p. 550)
5. Intellectual, conceptual, and quantitative abilities (p. 550)
6. Essential behavioral and social attributes (p. 550)
7. Ability to manage stressful situations (p. 550)

Individuals unable to meet these technical standards, with or without reasonable accommodation, will not be able to complete the program.

### **GENERAL ABILITIES**

The student is expected to possess functional use of the senses of vision, touch, hearing, and smell so that data received by the senses may be integrated, analyzed, and synthesized in a consistent and accurate manner. A student must be able to respond promptly to urgent situations that may occur during clinical training activities and must not hinder the ability of other members of the healthcare team to provide prompt treatment and care to patients.

### **OBSERVATIONAL ABILITY**

The student must have sufficient capacity to make accurate visual observations and interpret them in the context of laboratory studies, medication administration, and patient care activities. In addition, the student must be able to document these observations and maintain accurate records.

### **COMMUNICATION ABILITY**

The student must communicate both verbally and nonverbally in order to elicit information and to convey that information to others. Each student must have the ability to read and write accurately and comprehensively in English. The student must be able to thoroughly

comprehend and fluently speak the English language so as to facilitate communication with patients, families, professionals in healthcare settings, instructors, and other students. The student must also be able to present information in a professional, logical manner and to provide counseling and instruction in order to effectively care for patients and their families.

### MOTOR ABILITY

The student must be able to perform gross and fine motor movements with sufficient coordination needed to perform complete physical examinations utilizing the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers. A student must develop the skills needed to perform or assist with procedures, treatments, administration of medication, and the management and operation of diagnostic and therapeutic medical equipment. The student must possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving, and physical exertion required for satisfactory and safe performance in the clinical and classroom settings.

### INTELLECTUAL, CONCEPTUAL, AND QUANTITATIVE ABILITIES

The student must be able to develop and refine critical thinking skills that are essential to nursing practice. Critical thinking involves the abilities to measure, calculate, reason, analyze, and synthesize objective and subjective data, and to make decisions, often in a time-urgent environment, that reflect consistent and thoughtful deliberation and sound clinical judgment.

### BEHAVIORAL AND SOCIAL ATTRIBUTES

Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the nursing programs. The student must be able to work under supervision of a clinical instructor or preceptor; this is essential to ensure patient safety. The student must exercise good judgment and promptly complete all responsibilities in the classroom and clinical settings. The ability to establish culturally competent relationships with individuals, families, and groups, and to respond effectively to patients who have different intellectual capacities, is critical to nursing practice.

### EXAMINATIONS DISABILITY AND SPECIAL NEEDS

Students with special needs are encouraged to contact the Disability Resource Center (DRC) in 20 Dodge Hall to register and request services. Students must notify the instructor at the beginning of the semester if they plan to use DRC services throughout the course. The staff in that office is available for assistance.

### ABILITY TO MANAGE STRESSFUL SITUATIONS

The student must be able to adapt to and function effectively in stressful situations in both the classroom and clinical settings, including emergency situations. These stressors include personal, patient care/family, faculty/peer, and or program-related issues.

### State Board Nursing Examination

In Massachusetts, and several other states, the registering board requires that graduates taking the National Council Licensing Examination (NCLEX-RN) meet standards of "good moral character" (GMC). Students may review the GMC requirement specified at Massachusetts General Laws Chapter 112, sections 74, 74A, and 76; Licensure Policy No. 00-01 under "Rules & Regulations" on the Massachusetts BORN website.

Please visit Bouvé College Program Learning Outcomes for the specific student learning outcomes for this program.

### Program Requirements

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

Code	Title	Hours
<b>SEMESTER 1</b>		
NRSR 2001	Foundations of Professional Nursing Practice	2
NRSR 2220 and NRSR 2221	Health Assessment and Fundamental Nursing Skills and Lab for NRSR 2220	4
NRSR 2350	Integrated Pathophysiology and Pharmaceutical Interventions for Nursing Practice	6
NRSR 3302 and NRSR 3303	Nursing with Women and Families and Clinical for NRSR 3302	5
<b>SEMESTER 2</b>		
NRSR 2210	Influences on Health and Illness: A Nursing Perspective	3
NRSR 3320 and NRSR 3321	Nursing Care of Adults 1 and Clinical for NRSR 3320	6
NRSR 3400 and NRSR 3401	Nursing and the Promotion of Mental Health and Clinical for NRSR 3400	5
NRSR 3323 and NRSR 3324	Advanced Assessment and Interventions and Lab for NRSR 3323	2
<b>SEMESTER 3</b>		
NRSR 3420 and NRSR 3421	Nursing Care of Adults 2 and Clinical for NRSR 3420	6
NRSR 4502 and NRSR 4503	Nursing Care of the Child and Clinical for NRSR 4502	6
HLTH 5450	Healthcare Research	4
<b>SEMESTER 4</b>		
NRSR 4604 and NRSR 4605	Public Health Community Nursing and Clinical for NRSR 4604	5
NRSR 4610	Managing and Leading in Healthcare	4
NRSR 4995 and NRSR 4996	Comprehensive Nursing Practicum and Clinical for NRSR 4995	5
NRSR 2150	Ethical Healthcare: Genetics and Genomics	4

### Program Requirement

67 total semester hours required

### Wellness Studies, Minor

The wellness studies minor provides a holistic approach to the study of the human wellness experience. Offering interdisciplinary enrollment, this minor includes foundational wellness courses, as well as a range of interdisciplinary electives that embrace evidence-based science and education vis-à-vis selected domains of wellness. A cross-cultural, life span approach to individual and population wellness and well-being is offered as an experiential learning initiative.

As Northeastern University guides students in the ways of self-managing (life-long learning), an understanding of the nature and practices of



wellness may inform deliberative decision-making processes that lead to the attainment of wellness-informed lifestyle choices. Over time, these choices may inform the design and crafting of a life well lived.

## Minor Requirements

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

## Required Courses

Code	Title	Hours
NRSG 1205 or NRSG 1206	Wellness Wellness Abroad	4
NRSG 5000	Advanced Perspectives in Wellness	4

## Electives

Code	Title	Hours
Complete two of the following:		7-8
COMM 2135	Sex and Interpersonal Communication	
COMM 2555	Games for Change	
COMM 3230	Interpersonal Communication	
ENGL 2770	Writing to Heal	
EXSC 1120	Introduction to Exercise, Fitness, and Health	
HLTH 2302	Alternative Medicine	
HLTH 5002 or NRSG 2206	Mindfulness: Theory and Practice Global Perspectives in the Science and Practice of Mindfulness	
HSCI 1105 or HSCI 1107	Human Nutrition Nutrition Service Learning	
HSCI 2350	Advanced Nutrition in Health and Disease	
PSYC 2306	Food, Behavior, and Eating Disorders	
SOCL 1246	Environment and Society	
WMNS 2800	Sexual Orientation and Gender Expression	

## GPA Requirement

Minimum 2.000 GPA required in all minor courses

## Credit Requirement

A minimum of 15 hours is required.

## School of Pharmacy

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

**Miriam A. Mobley Smith, PharmD, FASHP**  
Interim Dean and Visiting Professor

140 The Fenway  
617.373.3069  
617.373.7655 (fax)

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

The School of Pharmacy is dedicated to excellence in pharmacy-related education, research, and service, including the provision of patient care. The school seeks to prepare students with knowledge, skills, and values for careers in pharmacy practice and the pharmaceutical

sciences. School of Pharmacy programs promote intellectual growth, professionalism, and lifelong learning. Through the generation and dissemination of new knowledge and through scholarship and community service, the school contributes to improved individual and population health.

The school offers two programs for undergraduate students: the pharmacy program, leading to the Doctor of Pharmacy degree, and the Bachelor of Science in Pharmaceutical Sciences program. These programs allow students interested in pharmacy practice or the pharmaceutical sciences to choose the pathway most suited to their professional goals. The Doctor of Pharmacy degree is the entry-level professional degree earned by pharmacists. The Bachelor of Science in Pharmaceutical Sciences degree is designed for students interested in research in the area of drug design and delivery, pharmacology, pharmaceuticals, or interdisciplinary research collaborations. The bachelor's degree does not qualify a graduate for the pharmacist licensure exam.

## Programs

### Bachelor of Science (BS)

- Pharmaceutical Sciences (p. 551)
- Pharmacy Studies (p. 554)

### Doctor of Pharmacy (PharmD)

- Pharmacy (p. 556)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. 562)

## 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; pharmaceuticals and the allied fields of toxicology, chemical biology, and nanomedicine; and a spectrum of emerging health science disciplines that span classical life sciences, engineering, and biotechnology. All students take courses in basic chemistry, basic biology, organic chemistry, physiology, pharmacology, medicinal chemistry, and pharmaceutical sciences. Students can then further specialize their 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 identification of research opportunities, this course also introduces students to 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 at least one co-op experience. Graduates are positioned to pursue MS and PhD programs in the biomedical sciences, medical schools, and other health professional degree programs.

### Bachelor of Science in Pharmaceutical Sciences— Progression Standards

The Bachelor of Science in Pharmaceutical Sciences requires students to satisfy a set of academic standards that include maintaining an overall GPA of 3.000 or better. A grade of C is the minimal passing grade for any of the required courses in the major.

Bachelor of Science Students in this program are expected to maintain a cumulative GPA of 3.000 each semester to remain in good academic standing and to progress towards graduation. If a student's cumulative GPA falls below the required 3.000, a student may be on probation for only two semesters, or until the course is offered again, unless the advisor approves an action plan that specifies a longer (but definite) period. A student may only be placed on probation twice during enrollment in the program and must correct all deficiencies, as specified, in each respective action plan during the applicable probationary period. Failure to remediate the deficiency within the agreed time may result in dismissal from the program.

The program also requires students to seek out and establish 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. Each student must 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 Experience

The Bachelor of Science in Pharmaceutical Sciences requires students to earn a minimum of 12 credits for laboratory research through participation in a research rotation (Lab Research Rotation (PHSC 2100)) and the writing and completion of an undergraduate thesis (comprised of Senior Thesis (PHSC 4997) and Senior Thesis Continuation (PHSC 4998)). Each student must take the initiative to seek out opportunities for undergraduate laboratory research either on campus, off campus at a neighboring university, or in an industry setting accessible to the student, under the direction of a faculty-level mentor. Students are assisted with securing laboratory research experiences through participation in Introduction to Health Science Research (PHSC 2650) during the spring of the first year and, as needed, through work with a faculty advisor within the Bachelor of Science Pharmaceutical Sciences program. A variety of university resources are also available to assist students in finding opportunities, including the Bouvé College Office of Research,

the Northeastern University Office of Undergraduate Research and Fellowships, the Northeastern University Integrated Initiative for Global Health, and various other departmental and college resources across Northeastern University.

### Change of Major

Students are eligible to transfer into the program at any point prior to the third year of the program. All students who wish to transfer into the program and have completed General Biology 1 (BIOL 1111) and Lab for BIOL 1111 (BIOL 1112) and General Chemistry 1 (CHEM 1211) and Lab for CHEM 1211 (CHEM 1212) must have earned a grade of B or better and have an overall GPA of 3.000 or better.

### Academic Appeals

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé College of Health Sciences Academic Affairs Appeals Process and the Northeastern University Appeals Policies and Procedures.

### Program Learning Outcomes

Please visit Bouvé College Program Learning Outcomes (<https://bouve.northeastern.edu/bchs/about/learning-outcomes/>) for the specific student learning outcomes for this program.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

Some NUpath requirements are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with open electives.

### Pharmaceutical Sciences Major Requirements

Code	Title	Hours
<b>SEMESTER 1</b>		
PHMD 1000	College: An Introduction	1
<b>SEMESTER 2</b>		
PHSC 2650	Introduction to Health Science Research	4
<b>SEMESTER 3</b>		
PHSC 2000	Professional Development for Pharmaceutical Sciences Co-op	1
PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	4
PHSC 2100	Lab Research Rotation	4
<b>SEMESTER 4</b>		
PHSC 2303 and PHSC 2304	Human Physiology 2 and Human Physiology Lab	4
NU Path Elective		4

NU Path Elective		4
<b>SEMESTER 5</b>		
COOP 3945	Co-op Work Experience	0
<b>SEMESTER 6</b>		
PHSC 2320	Biochemistry	4
PHSC 3411	Pharmaceutics 1	4
PHSC 4501	Pharmacology/Medicinal Chemistry 1	5
<b>SEMESTER 7</b>		
COOP 3945	Co-op Work Experience	
<b>SEMESTER 8</b>		
PHSC 3412	Pharmaceutics 2	4
PHSC 3419	Pharmaceutics Laboratory	1
PHSC 4502	Pharmacology/Medicinal Chemistry 2	5
PHSC 5360	Anti-Infectives	4
Open Elective		0-4
<b>SEMESTER 9</b>		
PHSC 2400	Research Ethics for Beginning Health Scientists	4
PHTH 2210	Foundations of Biostatistics	2-4
or PHSC 6214	Experimental Design and Biostatistics	
PHSC 4997	Senior Thesis	4
Open Elective		3
Statistics/Experimental Design Requirement <sup>1</sup>		2-4
<b>SEMESTER 10</b>		
PHSC 2330	Immunology	3
PHSC 3430	Pharmacokinetics and Biopharmaceutics	3
PHSC 4998	Senior Thesis Continuation	4
NU Path Elective		4

<sup>1</sup> Students who opt for PHSC 6214 are required to complete a 2-4 credit elective in the same semester in order to fulfill the minimum credit hour enrollment requirement for this term.

## Supporting Courses

Code	Title	Hours
<b>SEMESTER 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
PSYC 1101	Foundations of Psychology	4
MATH 1245	Calculus with Applications	4
<b>SEMESTER 2</b>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
<b>SEMESTER 3</b>		
PHYS 1149 and PHYS 1150	Physics for Pharmacy and Lab for PHYS 1149	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5

<b>SEMESTER 4</b>		
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5

## Writing Requirement

Code	Title	Hours
<b>SEMESTER 2</b>		
ENGW 1111	First-Year Writing	4
<b>SEMESTER 6</b>		
ENGW 3306	Advanced Writing in the Health Professions	4

## Program Requirement

Minimum of 133 semester hours required

## Plan of Study

<b>Year 1</b>					
Fall	Hours	Spring	Hours	Summer Full Semester	Hours
CHEM 1211	4	CHEM 1214	4	Vacation or volunteer research experience	
CHEM 1212	1	CHEM 1215	1		
CHEM 1213	0	CHEM 1216	0		
BIOL 1111	4	BIOL 1113	4		
BIOL 1112	1	BIOL 1114	1		
PSYC 1101	4	ENGW 1111	4		
MATH 1245	4	PHSC 2650	4		
PHMD 1000	1				
		19		18	0

<b>Year 2</b>					
Fall	Hours	Spring	Hours	Summer Full Semester	Hours
CHEM 2311	4	CHEM 2313	4	PHMD 3945 Co-op/ Experiential Learning	
CHEM 2312	1	CHEM 2314	1		
CHEM 2319	0	CHEM 2320	0		
PHSC 2301	3	PHSC 2303	3		
PHSC 2302	1	PHSC 2304	1		
PHYS 1149	4	NUpath elective	4		
PHYS 1150	1	NUpath elective	4		
PHSC 2000	1				
PHSC 2100	4				
		19		17	0

<b>Year 3</b>					
Fall	Hours	Spring	Hours	Summer Full Semester	Hours
PHSC 2320	4	PHMD 3945 Co-op/ Experiential Learning		PHSC 4502	5

PHSC 4501	5	PHSC 3412	4
PHSC 3411	4	PHSC 3419	1
ENGW 3306	4	PHSC 5360	4
		Optional elective	0-4
17		0	14-18

**Year 4**

Fall	Hours Spring	Hours
PHSC 2400	4 PHSC 2330	3
PHSC 4997	4 PHSC 3430	3
Choose one of the following courses:	2-4 PHSC 4998	4
PHTH 221	NUpath elective	4
PHSC 6214		
Optional elective	2-4	
12-16		14

Total Hours: 130-138

## Pharmacy Studies, BS

Students enrolled in the Doctor of Pharmacy (PharmD) program will be awarded a Bachelor of Science in Pharmacy Studies after successful completion of all requirements in semesters 1 through 10 of the pharmacy curriculum (i.e., all requirements except for Advanced Pharmacy Practice Experiences). Please see the PharmD page (<http://catalog.northeastern.edu/undergraduate/health-sciences/pharmacy/pharmacy-pharmd/#planofstudytext>) in the Northeastern University Catalog for policies that apply to this program.

If the Bachelor of Science in Pharmacy Studies degree is the terminal degree (i.e., the student does not plan to continue on to the fourth professional year), an overall grade-point average (GPA) of 2.000 or greater is considered acceptable. Students who earn the Bachelor of Science in Pharmacy Studies as the terminal degree are not eligible for pharmacist licensure.

**PROGRAM PROGRESSION**

To progress into the first professional year of the PharmD program (P1), students must demonstrate good verbal and written communication skills, understanding of the pharmacy profession, and commitment to patient care through an interview process based on criteria set by the School of Pharmacy.

All students entering P1 in fall 2022 and beyond are required to complete the PharmCAS application. The PharmCAS application process is considered a formality in the progression process and will not jeopardize the student's preferred or guaranteed enrollment status.

Pharmacy students with a cumulative GPA of 3.200 or less and/or science prerequisite GPA of 3.000 or less following the fall semester of the sophomore year may experience a delayed start as a registered pharmacy intern for the first co-op (IPPE), as the School of Pharmacy will not submit intern licensure documentation to the Massachusetts Board of Registration in Pharmacy until satisfactory spring grades are verified.

To progress into the subsequent semester of professional courses, students must receive a grade of C or better in all PHMD and PHSC

courses, as well as in any course completed to fulfill the professional elective requirement.

The university requires a minimum grade of C for First-Year Writing (ENGW 1111) and Advanced Writing in the Health Professions (ENGW 3306). The university's minimum passing grade for the course will be accepted for all other courses.

For pharmacy students, an unsatisfactory grade (U) in a co-op will be counted as a professional course deficiency.

Pharmacy students must maintain an overall GPA of 3.000 or higher during the professional years (P1–P4) of the Doctor of Pharmacy program.

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.

**ACADEMIC APPEALS**

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé College of Health Sciences Academic Affairs Appeals Process and the Northeastern University Appeals Policies and Procedures.

**PROGRAM STUDENT LEARNING OUTCOMES**

See Bouvé College Learning Outcomes for the specific student learning outcomes for this program.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

Some NUpath requirements are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with an elective.

Code	Title	Hours
<b>SEMESTER 1</b>		
PHMD 1000	College: An Introduction	1
<b>SEMESTER 2</b>		
PHMD 1001	Introduction to the Profession of Pharmacy	1
<b>SEMESTER 3</b>		
PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	4
<b>SEMESTER 4</b>		
PHMD 1201 and PHMD 1202	Introduction to Pharmacy Practice and Lab for PHMD 1201	3
PHSC 2303 and PHSC 2304	Human Physiology 2 and Human Physiology Lab	4

**SEMESTER 5**

Co-op/Introductory Pharmacy Practice Experience

**SEMESTER 6**

PHMD 2350	Healthcare Systems	3
PHSC 2320	Biochemistry	4
PHSC 4501	Pharmacology/Medicinal Chemistry 1	5
PHSC 3411	Pharmaceutics 1	4

**SEMESTER 7**

Co-op/Introductory Pharmacy Practice Experience

**SEMESTER 8**

PHMD 2310 and PHMD 2311	Professional Communication in Pharmacy Practice and Lab for PHMD 2310	2.5
PHMD 5250	Pharmacy Care Management	3
PHSC 4502	Pharmacology/Medicinal Chemistry 2	5
PHSC 3412	Pharmaceutics 2	4
PHSC 3419	Pharmaceutics Laboratory	1

**SEMESTER 9**

Co-op/Introductory Pharmacy Practice Experience

**SEMESTER 10**

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 11**

PHMD 5330	Jurisprudence	3
PHSC 5360	Anti-Infectives	4
PHMD 4621	Comprehensive Disease Management 2	6
PHMD 4622	Comprehensive Disease Management 2 Seminar	1
PHMD 4623	Comprehensive Disease Management 2 Skills Lab	0.5

**SEMESTER 12**

PHMD 5560	Applied Drug Information	2
PHMD 4631	Comprehensive Disease Management 3	6
PHMD 4632	Comprehensive Disease Management 3 Seminar	1
PHMD 4633	Comprehensive Disease Management 3 Skills Lab	0.5

**SEMESTER 13**

PHMD 4641	Comprehensive Disease Management 4	6
PHMD 4642	Comprehensive Disease Management 4 Seminar	1
PHMD 4643	Comprehensive Disease Management 4 Skills Lab	0.5
PHMD 5270	Economic Evaluation of Pharmaceuticals and Pharmacy Practice	2
PHMD 5450	Advanced Pharmacy Practice Experience Preparatory Seminar	1

**Elective and Capstone Requirements**

Code	Title	Hours
<b>Electives</b>		
A minimum of 16 semester hours of open electives is required. Additional electives may be required to fulfill the total semester hours required for your program.		16
Students must use open electives to fulfill the NUPath Interpreting Culture and Exploring Creative Expression and Innovation attributes (if not already fulfilled through prior coursework).		
<b>Professional Elective</b>		
Complete at least 2 semester hours during the professional phase of the program (after semester 5) from the following:		2
CAEP 3480	Counseling Theories and Practice	
CAEP 5200	Motivational Interviewing in a Healthcare Setting	
CAEP 6203	Understanding Culture and Diversity	
CAEP 6220	Development Across the Life Span	
HINF 5101	Introduction to Health Informatics and Health Information Systems	
HINF 5407	Business Application of Decision Support in Healthcare	
HINF 6205	Creation and Application of Medical Knowledge	
HINF 6404	Patient Engagement Informatics and Analytics	
HLTH 1010	From the Community to the Intensive Care Unit: Approaching Interdisciplinary Research in the Elderly	
HLTH 1510	Introduction to Healthcare Ethics	
HLTH 2100	Interprofessional Ethics for Individual and Population Health	
HLTH 2302	Alternative Medicine	
HLTH 5002	Mindfulness: Theory and Practice	
HLTH 5135	Developing an Interdisciplinary Approach to Health Management for Older Adults	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
HLTH 5730	Global Perspectives in Disability and Health	
HSCI 1105	Human Nutrition	
HSCI 2350	Advanced Nutrition in Health and Disease	
HSCI 2500	Public Health Nutrition in the Community	
HSCI 5230	Clinical Nutrition Applications in Health and Disease	
NRS 1205	Wellness	
PHMD 3600	Leadership and Advocacy in Health Professions	
PHMD 4350	Exploring Academic Careers	
PHMD 4581	Cancer Chemotherapy	
PHMD 4585	Research Methods in Health Systems	
PHMD 4700	Principles in General Medicine	
PHMD 4890	Contemporary Issues in Geriatric Pharmacy	

PHMD 4991	Research	
PHMD 4992	Directed Study	
PHMD 5223	Evidence-Based Medicine	
PHMD 5575	Pharmaceutical Industry	
PHMD 5675	Ambulatory Care Pharmacy Practice in Urban Health	
PHMD 5900	Self-Care and Nonprescription Medications: A Team-Based Approach	
PHSC 4991	Research	
PHSC 4992	Directed Study	
PHSC 5100	Concepts in Pharmaceutical Science	
PHSC 5400	Principles of Drug Design	
PHSC 5500	Repurposing Drugs for Cancer Immunotherapies	
PHSC 5555	Pharmaceutical Toxicology	
PHSC 6218	Biomedical Chemical Analysis	
PHSC 6222	The Chemistry and Biology of Drugs of Abuse	
PHSC 6224	Behavioral Pharmacology and Drug Discovery	
PHSC 6290	Biophysical Methods in Drug Discovery	
PTH 1270	Introduction to Global Health	
PTH 5222	Health Advocacy	
PTH 5226	Strategic Management and Leadership in Healthcare	
PTH 5230	Global Health	
PTH 5232	Evaluating Healthcare Quality	
PTH 5234	Economic Perspectives on Health Policy	
PTH 5236	Public Health Nutrition	
PTH 5300	Project Management in Public Health	
PTH 5310	Budget Principles in Public Health	
PTH 5320	Grant Writing in Public Health	
PTH 6320	Qualitative Methods in Health and Illness	
PMST 6250	Advanced Physical Pharmacy	
PMST 6254	Advanced Drug Delivery Systems	
SLPA 1101	Introduction to Communication Disorders	
SLPA 1555	Communication Disorders in Movies	
<b>Capstone</b>		
PHMD 5600	Pharmacy Capstone	4

### Supporting Courses

Code	Title	Hours
<b>SEMESTER 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
PSYC 1101	Foundations of Psychology	4
MATH 1245	Calculus with Applications	4
<b>SEMESTER 2</b>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5

CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
ENGW 1111	First-Year Writing	4
NUpath Elective		
<b>SEMESTER 3</b>		
PHYS 1149 and PHYS 1150	Physics for Pharmacy and Lab for PHYS 1149	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
NUpath Elective		
<b>SEMESTER 4</b>		
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
ENGW 3306	Advanced Writing in the Health Professions	4

### Progression Requirements

Code	Title	Hours
Freshman First-year students must complete at least 27 semester hours and meet all major prerequisite course requirements to progress to sophomore status.		
A minimum grade of C is required in major prerequisite courses (those identified with the subject code: BIOL, CHEM, MATH, PHYS).		

To progress into the subsequent year of professional courses, students must have completed all professional prerequisites with the required minimum passing grade, 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 (courses with prefix BIOL, CHEM, MATH, and PHYS) prerequisite GPA of 3.000 or higher.

### Program Requirement

168 total semester hours required

## Pharmacy, PharmD

To earn the Doctor of Pharmacy degree (PharmD), students must complete four years of professional courses preceded by two years of pre-professional studies at Northeastern University. The PharmD fully integrates campus-based learning with experiential learning, including the university's signature cooperative education (co-op) program, to provide students with the knowledge, skills, and abilities necessary to succeed in the pharmacy profession. Our students promote and ensure the safe and effective use of drugs and provide medication therapy management services. In addition to preparing and dispensing prescribed medications, our students provide information to patients about medications and their uses; advise physicians, other prescribers, and other healthcare practitioners on medication selection, dosages, interactions, and adverse effects; and monitor patient responses to drug therapy.

Our students are well equipped to provide patient care services in a variety of settings. Most of our graduates work in community pharmacies or in healthcare facilities such as hospitals and ambulatory clinics. Additional practice opportunities exist in health maintenance organizations, private practice groups, long-term-care facilities, home healthcare, the Public Health Service, the armed services, and



law enforcement and regulatory agencies such as the Federal Drug Administration (FDA) or Drug Enforcement Administration (DEA). Graduates may also find employment in drug development, marketing and research within the pharmaceutical industry, colleges of pharmacy, and professional association management. In addition, many of our graduates go on to pharmacy practice residencies, fellowships, and leading graduate programs.

Doctor of Pharmacy students are admitted with the expectation that by working with faculty, staff, and each other, they will develop the knowledge, skills, and attitudes necessary for academic and professional success. Students follow academic progression plans for their respective years of graduation. Any deviation from the prescribed curriculum will require faculty/staff permission and an approved plan of study from the School of Pharmacy Academic Standing Committee.

The curriculum includes both Introductory Pharmacy Practice Experiences (IPPEs, fulfilled by cooperative education) and Advanced Pharmacy Practice Experiences (APPEs). These pharmacy practice experiences are provided primarily under the direct supervision of qualified pharmacist preceptors and occasionally with other qualified healthcare professionals. The school is affiliated with many world-class practice sites throughout the United States, providing students with access to experienced clinicians and scholars. Although every effort is made to accommodate individual circumstances and requests, students should be prepared to travel outside the Boston area to complete some of their pharmacy practice experiences. Availability of a car may be required, as some sites are not accessible by public transportation. All expenses associated with pharmacy practice experiences, including travel and housing, are the responsibility of the student.

IPPEs are competitive placements that are based on job availability in a geographic region. The placements are facilitated by School of Pharmacy cooperative education coordinators. Students are required to earn satisfactory (S) grades on one IPPE in a community setting and on one IPPE in an institutional/hospital practice setting.

APPE placements are provided based on site/preceptor availability and the final approval of the School of Pharmacy Office of Experiential Education (OEE). Students may be able to petition the OEE for special arrangement APPEs; however, availability for such requests is limited.

To be eligible for a Doctor of Pharmacy degree, a student must successfully complete all courses in the curriculum including the IPPEs (co-op) and APPEs; meet the academic progression standards of the program; meet the technical standards of the program; and satisfy all other requirements as stated. The pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education (ACPE) (<https://www.acpe-accredit.org/>) and adheres to the standards established by ACPE.

Pharmacy graduates must meet specific requirements to qualify for professional licensure in the state where they plan to practice as a registered pharmacist. These requirements include graduating from an accredited school of pharmacy, passing national and state board examinations, and completing internship hours. The internship is a period of practical experience conducted under the supervision of a registered pharmacist. Massachusetts requires 1,500 internship hours, all of which are satisfied through completion of IPPEs (co-op) and APPEs.

Professional and/or legal exigencies arise from time to time, which may necessitate changes in a pharmacy course, progression, and/or graduation requirements. Students should review their status with academic advisors on a timely basis and refer to current publications for updated information.

## PROGRAM PROGRESSION

To progress into the first professional year of the PharmD program (P1), students must demonstrate good verbal and written communication skills, understanding of the pharmacy profession, and commitment to patient care through an interview process based on criteria set by the School of Pharmacy.

All students entering P1 in fall 2022 and beyond are required to complete the PharmCAS application. The PharmCAS application process is considered a formality in the progression process and will not jeopardize the student's preferred or guaranteed enrollment status.

Pharmacy students with a cumulative GPA of 3.200 or less and/or science prerequisite GPA of 3.000 or less following the fall semester of the sophomore year may experience a delayed start as a registered pharmacy intern for the first co-op (IPPE), as the School of Pharmacy will not submit intern licensure documentation to the Massachusetts Board of registration in Pharmacy until satisfactory spring grades are verified.

To progress into the subsequent semester of professional courses, students must receive a grade of C or better in all PHMD and PHSC courses, as well as in any course completed to fulfill the professional elective requirement.

The university requires a minimum grade of C for First-Year Writing (ENGW 1111) and Advanced Writing in the Health Professions (ENGW 3306). The university's minimum passing grade for the course will be accepted for all other courses.

For pharmacy students, an unsatisfactory grade (U) in a co-op will be counted as a professional course deficiency.

Pharmacy (PharmD-U) students must maintain an overall GPA of 3.000 or higher during the professional years (P1–P4) of the Doctor of Pharmacy program.

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.

Students are eligible to begin Advance Pharmacy Practice Experiences (APPEs) following successful completion of didactic coursework. Completing didactic coursework during P4 year is prohibited.

## REQUIREMENTS FOR THE PHARM D PHARMACY PRACTICE EXPERIENCES (PPES)

Requirements for the successful completion of the PharmD PPEs include:

1. Evidence of health clearance from University Health and Counseling Services before placements at any PPE site.
2. Satisfactory completion of any additional site-specific requirements including, but not limited to, criminal record information (CORI), urine drug screens, and verification of immunization status. All fees associated with these requirements are the responsibility of the student. Please see below for management of positive urine drug screens.
3. Adherence to the school's code of professional conduct and university's code of conduct policies while off-campus.
4. Maintenance of an active pharmacy intern license in every state where the student completes an experience.
5. Compliance with site-specific requirements (via site descriptions) and completion of site requests within specified deadlines. Students who fail to complete these requirements as directed will likely incur grade



penalties and may experience a delay of graduation or dismissal from the pharmacy program.

### **Management of Positive Urine Drug Screens**

If the student learns the urine drug screen (test #1) is positive, the student will notify the OEE (pharmacyoe@northeastern.edu) and immediately complete a second urine screen (test #2). A professional concern form will be completed based on test #1 results.

- If urine screen test #2 is negative (-), the student will be allowed to continue the PPEs. However, the student will be asked to complete a random urine screen (test #3) at a time determined by the OEE. If this urine screen (test #3) is positive (+), the student will be administratively removed from the active PPEs and graduation may be delayed. A second professional concern form will be completed, based on test #3 results. The return to PPEs will occur once a repeat urine test is negative. That repeat negative test will be followed up by a random urine screen at a time determined by the OEE.
- If the urine screen (test #2) is positive (+), the student will be administratively removed from the PPEs and graduation may be delayed. The return to PPEs will occur once a repeat urine screen is negative. That negative screen will be followed up by a random urine screen at a time determined by the OEE. A second professional concern form will be completed based on a positive test #3 result.

### **PROGRAM POLICIES**

Students are expected to adhere to the policies and standards of their program major, as stated, to progress through their curriculum as planned. Students seeking any exceptions to the program policies and standards specified for their program major must present a petition before the School of Pharmacy Academic Standing Committee.

Given programmatic requirements, coupled with concerns over the loss of therapeutic knowledge, requests for a general leave of absence:

- Must comply with all stated Northeastern University general policies, regardless of the academic year.
- May be made at any time period during the P1 or P2 years.
- During the P3 academic year, any request for a general leave must be made no later than February 1 of the given academic year. Requests after this date will not be permitted.
- During the P4 academic year, requests for a general leave cannot be made at any time.

### **SOP PROFESSIONAL CODE OF CONDUCT**

Pre-professional and professional year students are expected to adhere to the SOP - Professional Code of Conduct (<https://bouve.northeastern.edu/assets/uploads/sites/5/2014/08/sop-code-professional-conduct.pdf>).

### **TECHNICAL STANDARDS FOR THE DOCTOR OF PHARMACY PROGRAM**

The PharmD program at Northeastern University is a rigorous and challenging academic program that requires students to possess specific characteristics and abilities within the cognitive, affective, and psychomotor domains, referred to here as technical standards. To successfully progress in and ultimately complete the didactic, laboratory, and experiential components of the PharmD program, students must meet the standards described below.

#### **Intellectual Abilities**

Students must have well-developed problem-solving and critical-thinking skills. Cognitive function must be appropriate to integrate, evaluate, and apply information gained through measurement, analysis, calculation, and reasoning. Students must have the capacity to learn efficiently in classroom, laboratory, small group and experiential settings, and through

independent study. Students are required to demonstrate the ability to integrate course content knowledge with clinical practice applications to optimize medication therapy management.

#### **Communication Skills**

Students must be able to communicate effectively with colleagues, professors, patients, families, and healthcare providers. This includes efficiently comprehending, speaking, reading, and writing in English. Students must be able to process and use appropriate nonverbal cues and be proficient in the use of electronic communication media.

#### **Behavioral and Social Attributes**

Students must demonstrate professionalism, maturity, integrity, honesty, compassion, and respect when relating to others. Students must have sufficient mental and emotional health to complete work and responsibilities using good judgment. Students must be able to tolerate and adapt to stressful workloads and situations and modify behavior based on constructive criticism. Students must be able to function in accordance with the legal, ethical, and professional standards of practice.

#### **Observation and Motor Skills**

Students must have functional use of visual, auditory, and tactile senses. Students must be able to observe and perform experiments, physical assessments, patient interviews, and medication order processing. Students must be able to distinguish physical characteristics of medications by inspection. Students must have coordination of gross and fine muscular movements sufficient to perform pharmacy-related tasks including compounding and dispensing medications, administering medications, and using computers and other technology necessary for learning and professional practice

### **ACADEMIC DISMISSAL FROM MAJOR**

PharmD students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Failure to earn a grade of C or better in three professional courses, regardless of remediation. Within the PharmD program, each specific professional course (with separate registration number) will be counted as a separate failure even if content is related.
- Failure to earn the minimum required grade in the same course twice.
- Failure to maintain a GPA of 3.000 after two semesters of probation.
- The expected graduation date may not change more than twice.

The PharmD program monitors and promotes the development of professional behaviors in its students to ensure appropriate professionalism in the classroom, local and global communities, and clinical settings. Breach of adherence to these standards may result in dismissal from the program.

### **ACADEMIC APPEALS**

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé College of Health Sciences Academic Affairs Appeals Process and the Northeastern University Appeals Policies and Procedures.

### **PROGRESSION TO THE 4TH PROFESSIONAL YEAR (P4) OF THE PHARM D PROGRAM**

Students enrolled in the PharmD program will be awarded a Bachelor of Science in Pharmacy Studies after successful completion of all didactic and laboratory courses in semesters 1 through 13 of the pharmacy curriculum. To earn the PharmD degree, students must complete an additional 36 semester hours of APPEs with an overall GPA of 3.000 or higher. The PharmD degree is required to pursue licensure or registration

as a pharmacist; graduates with the Bachelor of Science in Pharmacy Studies degree only are not eligible for pharmacist licensure.

### PROGRAM STUDENT LEARNING OUTCOMES

Please visit Bouvé College Learning Outcomes for the specific student learning outcomes for this program.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

Some NUpath requirements are not explicitly satisfied by required courses. Students are responsible for satisfying these requirements with an elective.

Code	Title	Hours
<b>SEMESTER 1</b>		
PHMD 1000	College: An Introduction	1
<b>SEMESTER 2</b>		
PHMD 1001	Introduction to the Profession of Pharmacy	1
<b>SEMESTER 3</b>		
PHSC 2301 and PHSC 2302	Human Physiology 1 and Human Anatomy Lab	4
<b>SEMESTER 4</b>		
PHMD 1201 and PHMD 1202	Introduction to Pharmacy Practice and Lab for PHMD 1201	3
PHSC 2303 and PHSC 2304	Human Physiology 2 and Human Physiology Lab	4
<b>SEMESTER 5</b>		
COOP 3945	Co-op Work Experience	0
<b>SEMESTER 6</b>		
PHMD 2350	Healthcare Systems	3
PHSC 2320	Biochemistry	4
PHSC 4501	Pharmacology/Medicinal Chemistry 1	5
PHSC 3411	Pharmaceutics 1	4
<b>SEMESTER 7</b>		
COOP 3945	Co-op Work Experience	0
<b>SEMESTER 8</b>		
PHMD 2310 and PHMD 2311	Professional Communication in Pharmacy Practice and Lab for PHMD 2310	2.5
PHMD 5250	Pharmacy Care Management	3
PHSC 4502	Pharmacology/Medicinal Chemistry 2	5
PHSC 3412	Pharmaceutics 2	4
PHSC 3419	Pharmaceutics Laboratory	1
<b>SEMESTER 9</b>		
COOP 3945	Co-op Work Experience	0

### SEMESTER 10

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 11, 12, or 13

PHMD 5600	Pharmacy Capstone	4
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### SEMESTER 11

PHMD 5330	Jurisprudence	3
PHSC 5360	Anti-Infectives	4
PHMD 4621	Comprehensive Disease Management 2	6
PHMD 4622	Comprehensive Disease Management 2 Seminar	1
PHMD 4623	Comprehensive Disease Management 2 Skills Lab	0.5

### SEMESTER 12

PHMD 5560	Applied Drug Information	2
PHMD 4631	Comprehensive Disease Management 3	6
PHMD 4632	Comprehensive Disease Management 3 Seminar	1
PHMD 4633	Comprehensive Disease Management 3 Skills Lab	0.5

### SEMESTER 13

PHMD 4641	Comprehensive Disease Management 4	6
PHMD 4642	Comprehensive Disease Management 4 Seminar	1
PHMD 4643	Comprehensive Disease Management 4 Skills Lab	0.5
PHMD 5270	Economic Evaluation of Pharmaceuticals and Pharmacy Practice	2
PHMD 5450	Advanced Pharmacy Practice Experience Preparatory Seminar	1

\* After completion of Semester 13, students who meet program requirements will earn the Bachelor of Science in Pharmacy Studies degree and progress into the final professional year of the program. This consists of one year of graduate study and 36 hours of Advanced Pharmacy Practice Experience coursework. See the PharmD program in the Northeastern University Graduate Catalog (<http://catalog.northeastern.edu/graduate/health-sciences/pharmacy/pharmd/#programrequirementstext>) for details.

### Elective Requirements

Code	Title	Hours
<b>Open Electives</b>		
A minimum of 16 semester hours of open electives is required. Additional electives may be required to fulfill the total semester hours required for your program.		16
Students must use open electives to fulfill the NUpath Interpreting Culture and Exploring Creative Expression and Innovation attributes (if not already fulfilled through prior coursework).		
<b>Professional Elective</b>		

Complete at least 2 semester hours during the professional phase of the program (after semester 5) from the following:

CAEP 3480	Counseling Theories and Practice
CAEP 5200	Motivational Interviewing in a Healthcare Setting
CAEP 6203	Understanding Culture and Diversity
CAEP 6220	Development Across the Life Span
HINF 5101	Introduction to Health Informatics and Health Information Systems
HINF 5407	Business Application of Decision Support in Healthcare
HINF 6205	Creation and Application of Medical Knowledge
HINF 6404	Patient Engagement Informatics and Analytics
HLTH 1010	From the Community to the Intensive Care Unit: Approaching Interdisciplinary Research in the Elderly
HLTH 1510	Introduction to Healthcare Ethics
HLTH 2100	Interprofessional Ethics for Individual and Population Health
HLTH 2302	Alternative Medicine
HLTH 5002	Mindfulness: Theory and Practice
HLTH 5135	Developing an Interdisciplinary Approach to Health Management for Older Adults
HLTH 5280	The (in)Visibility of (dis)Ability in Society
HLTH 5730	Global Perspectives in Disability and Health
HSCI 1105	Human Nutrition
HSCI 2350	Advanced Nutrition in Health and Disease
HSCI 2500	Public Health Nutrition in the Community
HSCI 5230	Clinical Nutrition Applications in Health and Disease
NRSG 1205	Wellness
PHMD 3600	Leadership and Advocacy in Health Professions
PHMD 4350	Exploring Academic Careers
PHMD 4581	Cancer Chemotherapy
PHMD 4585	Research Methods in Health Systems
PHMD 4700	Principles in General Medicine
PHMD 4890	Contemporary Issues in Geriatric Pharmacy
PHMD 4991	Research
PHMD 4992	Directed Study
PHMD 5223	Evidence-Based Medicine
PHMD 5575	Pharmaceutical Industry
PHMD 5675	Ambulatory Care Pharmacy Practice in Urban Health
PHMD 5900	Self-Care and Nonprescription Medications: A Team-Based Approach
PHSC 4991	Research
PHSC 4992	Directed Study
PHSC 5100	Concepts in Pharmaceutical Science

2

PHSC 5400	Principles of Drug Design
PHSC 5500	Repurposing Drugs for Cancer Immunotherapies
PHSC 5555	Pharmaceutical Toxicology
PHSC 6218	Biomedical Chemical Analysis
PHSC 6222	The Chemistry and Biology of Drugs of Abuse
PHSC 6224	Behavioral Pharmacology and Drug Discovery
PHSC 6290	Biophysical Methods in Drug Discovery
PHTH 1270	Introduction to Global Health
PHTH 5222	Health Advocacy
PHTH 5226	Strategic Management and Leadership in Healthcare
PHTH 5230	Global Health
PHTH 5232	Evaluating Healthcare Quality
PHTH 5234	Economic Perspectives on Health Policy
PHTH 5236	Public Health Nutrition
PHTH 5300	Project Management in Public Health
PHTH 5310	Budget Principles in Public Health
PHTH 5320	Grant Writing in Public Health
PHTH 6320	Qualitative Methods in Health and Illness
PMST 6250	Advanced Physical Pharmacy
PMST 6254	Advanced Drug Delivery Systems
SLPA 1101	Introduction to Communication Disorders
SLPA 1555	Communication Disorders in Movies

### Supporting Courses

Code	Title	Hours
<b>SEMESTER 1</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
PSYC 1101	Foundations of Psychology	4
MATH 1245	Calculus with Applications	4
<b>SEMESTER 2</b>		
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
ENGW 1111	First-Year Writing	4
NUpath Elective		4
<b>SEMESTER 3</b>		
PHYS 1149 and PHYS 1150	Physics for Pharmacy and Lab for PHYS 1149	5
CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
NUpath Elective		4
<b>SEMESTER 4</b>		

CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
ENGW 3306	Advanced Writing in the Health Professions	4

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	15.5

### Progression Requirements

**Code Title Hours**  
 Freshman First-year students must complete at least 27 semester hours and meet all major prerequisite course requirements to progress to sophomore status.

A minimum grade of C is required in major prerequisite courses (those identified with the subject code: BIOL, CHEM, MATH, PHYS).

To progress into the subsequent year of professional courses, students must have completed all professional prerequisites with the required minimum passing grade, 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 (courses with prefix BIOL, CHEM, MATH, and PHYS) prerequisite GPA of 3.000 or higher.

### Program Requirement

206 total semester hours required

### Plan of Study

#### Sample Plan of Study

#### Year 1

Fall	Hours	Spring	Hours	Summer Hours 1	Summer Hours 2	Hours
CHEM 1211	4	CHEM 1214	4	Vacation	0	Vacation 0
CHEM 1	1	CHEM 1	1			
CHEM 1213	0	CHEM 1216	0			
PHMD 1	1	BIOL 11	4			
PSYC 1101	4	BIOL 1114	1			
ENGW 1	4	PHMD 1	1			
BIOL 1111	4	MATH 1245	4			
BIOL 11	1	Elective	4			
	19		19		0	0

#### Year 2

Fall	Hours	Spring	Hours	Summer Hours Full Semester
CHEM 2311	4	CHEM 2313	4	COOP 3945 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	0

#### Year 3

Fall	Hours	Spring	Hours	Summer Hours Full Semester
PHSC 2320	4	COOP 3945	0	PHMD 2310 2

#### Year 4

Fall	Hours	Spring	Hours	Summer Hours Full Semester
COOP 3945	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 4623 0.5
				Elective capston 4
	0		16	18.5

#### Year 5

Fall	Hours	Spring	Hours
PHMD 4631	6	PHMD 4641	6
PHMD 4	1	PHMD 4	1
PHMD 4633	0.5	PHMD 4643	0.5
PHMD 5	2	PHMD 5	2
Elective/capstone	2-4	Elective/capstone	2-4
Elective capston	4	PHMD 5	1
Students should enroll in a minimum of 12 credits in this semester		Elective/capstone	4
	15.5-17.5		16.5-18.5

Total Hours: 170-174

### Physical Therapy, Movement, and Rehabilitation Sciences

Website (<https://bouve.northeastern.edu/physical-therapy/>)

**Kristin Curry Greenwood, PT, DPT, EdD, MS**  
 Clinical Professor and Chair

**Eric Folmar, PT, DPT, OCS**  
 Associate Clinical Professor and Associate Chair

301 Robinson Hall  
 617.373.3908  
 617.373.3161 (fax)  
 physicaltherapy@northeastern.edu

The cornerstone of the Department of Physical Therapy, Movement, and Rehabilitation Sciences is experiential learning aligned with the mission of Bouvé College and Health Sciences and Northeastern University's 2025 Academic Plan. The programs within the department enhance and

extend students' learning of human movement and rehabilitation through experiential education, interdisciplinary collaborations, interprofessional education, research opportunities, and a variety of global educational experiences. The department is led by a collaborative interdisciplinary body of faculty with research, scholarship, clinical, and teaching expertise across a diverse spectrum.

The Department of Physical Therapy, Movement, and Rehabilitation Sciences' research mission is to build the evidence for best practices to maintain and improve the health and well-being of local, national, and global community members. Students have the opportunity to work with faculty to conduct ongoing research in one of the nine Department of Physical Therapy, Movement, and Rehabilitation Sciences' labs and centers, including Neuromotor Systems Laboratory, Laboratory for Locomotion Research, ReGameVR Laboratory, Movement Neuroscience Laboratory, Musculoskeletal Epidemiology and Biomechanics Laboratory, Neuroscience Wet Lab, Occupational Biomechanics Laboratory, Teaching and Learning Innovation Lab, and the Center for Cognitive and Brain Health Program.

The Department of Physical Therapy, Movement, and Rehabilitation Sciences graduates are innovative global leaders who excel in clinical practice, research, worker wellness, ergonomics, human movement, and community service.

## Programs

### Minors

- Human Movement Science (p. 562)

### Human Movement Science, Minor

The Minor in Human Movement Science is open to all majors at the university with the exception of Bouvé Doctor of Physical Therapy students. The minor is designed for students who seek to complement their current studies with a more detailed understanding of the interplay of human anatomy and kinetic forces of movement specific to their chosen career path. It includes three required courses and one elective course with offerings that can be tailored to a student's interest in ergonomics, sport, kinetic movement, or deeper human anatomy knowledge through cadaveric education. Pursuing a Minor in Human Movement Science will complement students' knowledge in their related fields of science, engineering, and entrepreneurship to provide a baseline understanding of human anatomy, functional demands, and movement analysis as they relate to activities of daily living. To be admitted to the Minor in Human Movement Science, students must be in good academic standing (minimum 2.000 GPA overall).

### Program Requirements

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

### Required Courses

Code	Title	Hours
PT 3400	Human Kinesiology	4
PT 3500	Motor Control of Human Movement	4
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5

### Electives

Code	Title	Hours
Complete one of the following:		
PT 1880	Introduction to Sports Medicine	4-5
HLTH 2001	Introductory Skills for Healthcare and Rehabilitation	
PT 5410 and PT 5411	Functional Human Neuroanatomy and Lab for PT 5410	4-5
EXSC 4500	Exercise Physiology 1	
PT 5010 and PT 5011	Human Gross Anatomy and Lab for PT 5010	4-5
PT 3555	Human Pathology and the Influence on Movement	
BIOL 5601	Multidisciplinary Approaches in Motor Control	4-5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	

### GPA Requirement

All coursework must be completed at a minimum grade of C and courses may not be taken Pass/Fail.

### Credit Requirement

A minimum of 17 semester hours is required.

### Accelerated Bachelor/Graduate Degree Programs

Bouvé College of Health Science offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

### College of Science

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

**Hazel Sive, PhD**, Dean

**Brent D. Nelson, PhD**, Associate Dean, Undergraduate Affairs

**Mark Patterson, PhD**, Associate Dean, Research and Graduate Affairs

**Frederick C. Davis, PhD**, Associate Dean, Faculty Affairs, Diversity and Inclusion

**Sam Inman, MBA**, Interim Associate Dean, Administration and Finance

**James Poulos**, Associate Dean, Development

**Lauren Machunis**, Assistant Dean for Undergraduate Advising and Enrollment Management

**Kellie Melchin**, 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 award-winning student chapters of professional associations. The college seeks to provide students with the best possible foundation for achieving their goals, whether they seek to attend graduate school, professional school, or immediately pursue a career upon graduation.

The college offers Bachelor of Arts (BA), Bachelor of Science (BS), and Bachelor of Science/Master of Science (BS/MS) (PlusOne programs) degrees in a number of majors, 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. 42). In addition, students pursuing a Bachelor of Arts degree must fulfill the BA requirements (p. 45). 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 adviser 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 advisers located in the College of Science Student Services Office in 206 Mugar Hall and faculty advisers 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 adviser 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 adviser 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 adviser prior to the start of each semester. Pass/fail courses are restricted to electives outside of the major, minor, and NUPATH requirements.

### GRADUATION REQUIREMENTS

A minimum cumulative GPA requirement of 2.000 in major courses and a minimum cumulative GPA requirement of 2.000 overall are required for graduation. *Note:* The university requires a minimum grade of C for First-Year Writing and Advanced Writing requirements.

### CRITERIA FOR ACADEMIC PROBATION

Full-time students in the College of Science will be placed on academic probation effective for the following academic semester for any of the reasons noted below. A notation of the academic probation action will appear on the internal record but not on the permanent transcript.

#### First-year Students:

- Not maintaining a semester GPA of at least a 1.800 at the end of each full-term semester (fall, spring) of the first-year curriculum
- Not earning at least 12 semester hours at the end of each semester of the first-year curriculum
- Not earning at least 24 semester hours at the end of the two full-term semesters (fall, spring) of the first-year curriculum
- Accumulating three outstanding course deficiencies (grades of F, I, W, NE, U, or missing grades)

#### Upper-class and Transfer Students:

- Not earning at least 12 semester hours in the academic full-term semester (fall, spring) just completed
- Not maintaining an overall cumulative GPA of at least 2.000 at the end of each full-term academic semester (fall, spring)
- Accumulating three outstanding course deficiencies (grades of F, I, W, NE, U, or missing grades)
- Not following a program of study approved by the student's academic adviser

#### 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 adviser in the Office of Global Services (OGS) (<http://www.northeastern.edu/ogs/>) to discuss the impact of an academic dismissal as it relates to nonimmigrant visa status.

## Behavioral Neuroscience

Website (<https://cos.northeastern.edu/behavioral-neuroscience/>)

### Jennifer Ingemi, PhD

Assistant Teaching Professor and Interim Director

203 Mugar Life Sciences Building  
617.373.2852  
bns@northeastern.edu

Behavioral neuroscience is a broad and dynamic interdisciplinary field which focuses on understanding physiological brain mechanisms and how they give rise to behavioral functions in humans and animals. The relationship between the brain's activity and an organism's behavior, both normal and pathological, is examined at multiple levels of analysis, from how a cell functions to how a facial expression conveys trust or fear.

As a behavioral neuroscience major, you will take courses across multiple departments to acquire foundational knowledge and strong critical thinking skills in the realms of biology, psychology, physical sciences, and mathematics. Through our combined majors, you can explore the intersection of behavioral neuroscience with complementary disciplines including philosophy, design, computer science, and data science. For some of our majors, we offer an accompanying PlusOne Master of Science in Bioinformatics or Applied Behavior Analysis.

Ample opportunities exist for students to put theory into practice while acquiring valuable hands-on research and clinical experience at renowned institutions across the world through Northeastern's co-op program. Faculty-mentored directed studies and honors projects are guided by investigators with shared interests from academic units, centers, and institutes throughout campus.

Our rigorous and comprehensive curriculum prepares students for employment in clinical settings or the biotech and pharmaceutical industry or for further graduate training in a plethora of science disciplines or in healthcare professions. Our graduates are qualified for a wide variety of careers including nonprofits, law, science writing, big data, artificial intelligence, and more.

## Programs

### Bachelor of Science (BS)

- Behavioral Neuroscience (p. 564)
- Behavioral Neuroscience and Design (p. 91)
- Behavioral Neuroscience and Philosophy (p. 569)

- Computer Science and Behavioral Neuroscience (p. 320)
- Data Science and Behavioral Neuroscience (p. 388)

## Minor

- Behavioral Neuroscience (p. 577)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Behavioral Neuroscience, BS

The behavioral neuroscience curriculum focuses on the biological bases underlying behavior under normal and pathological states. The program combines the disciplines of biology and psychology with a strong background in basic physical sciences and mathematics to understand how the behavior of humans and animals is controlled by physiological systems. Students gain a solid foundation in the anatomical and functional specializations of the brain and neural mechanisms from neurons to circuits to networks. Students then choose from a range of advanced electives, including those that make up the behavioral neuroscience core, to delve deeply into diverse specializations and current topics in the field.

*Note:* Due to overlap in course content, double majoring in behavioral neuroscience with any of the following majors is not permitted: psychology, biology, cell and molecular biology, or biochemistry.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Behavioral Neuroscience Core Requirements

Code	Title	Hours
Complete five of the following courses. At least three must be numbered in the 4000–5999 range:		
BIOL 3403	Animal Behavior	20-21
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5587	Comparative Neurobiology	
or BIOL 3405	Neurobiology	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	

PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics
PT 5410 and PT 5411	Functional Human Neuroanatomy and Lab for PT 5410
One course may be a research or experiential course:	
BIOL 4991	Research
BIOL 4994	Internship
BIOL 4970	Junior/Senior Honors Project 1
BIOL 4971	Junior/Senior Honors Project 2
BNSC 4994	Internship
BNSC 4970	Junior/Senior Honors Project 1
BNSC 4971	Junior/Senior Honors Project 2
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience
PSYC 4550	Basic Principles of Magnetic Resonance Physics and Applications in Neuroscience
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4991	Directed Study Research
PSYC 4994	Internship in Psychology
PSYC 4965	Undergraduate Teaching Experience
PSYC 4970	Junior/Senior Honors Project 1
PSYC 4971	Junior/Senior Honors Project 2

### Behavioral Neuroscience Advanced Courses

Code	Title	Hours
<b>Psychology Elective</b>		
An additional behavioral neuroscience core course may be used to fulfill this requirement.		
Complete one of the following:		4
PSYC 3358	Behavior Therapies	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Biology Elective</b>		
Complete one of the following:		4-5
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3409	Current Topics in Biology	
BIOL 3411	Current Topics in Cell and Molecular Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3603	Mammalian Systems Physiology	

BIOL 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
BIOL 5593	Cell and Molecular Biology of Aging

### Capstone Course

Complete one of the following:		4
BIOL 4701	Biology Capstone	
PSYC 4654 to PSYC 4678		

### Behavioral Neuroscience Major Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern	1
PSYC 1101	Foundations of Psychology	4
PSYC 3458	Biological Psychology	4
PSYC 3200	Clinical Neuroanatomy	4
ENVR 2500 and ENVR 2501 or PSYC 2320	Biostatistics and Lab for ENVR 2500 and Statistics in Psychological Research	4-5
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
<b>Breadth Courses</b>		
MATH 1251 or MATH 1241	Calculus and Differential Equations for Biology 1 and Calculus 1	4
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
Complete one of the following:		5
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	

PHYS 1171 Physics 1 for Bioscience and  
and PHYS 1172 Bioengineering  
and PHYS 1173 and Lab for PHYS 1171  
and Interactive Learning Seminar for  
PHYS 1171

### Behavioral Neuroscience Major Credit/GPA Requirement

Complete 90 semester hours in the major with a minimum 2.000 GPA.

Due to overlap in course content, double majoring in behavioral neuroscience with any of the following majors is not permitted: psychology, biology, cell and molecular biology, or biochemistry.

### Program Requirement

132 total semester hours required

### Plan of Study

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

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	BIOL 2301 and BIOL 2302	5	Vacation	0
MATH 1251	4	PSYC 3458	4	Adv PSYC elective	4		
PSYC 1101	4	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	CHEM 2311 and CHEM 2312	5				
CHEM 1161 and CHEM 1162 and CHEM 1163	5						
	19		17		9		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	BIOL 2309	4	PSYC 2320	4	Co-op	0
CHEM 2313 and CHEM 2314	5	DS 2000 and DS 2001	4	Elective	4		
BNS core course 1	4	BNS core course 2	4				
Elective	4	Elective	4				
		EESC 2000	1				
	17		17		8		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Adv BIOL elective	5	ENGW 3307	4	Co-op	0
		BNS core course 3	4	Elective	4		
		BNS core course 4	4				
		Elective	4				
	0		17		8		0

##### Year 4

Fall	Hours	Spring	Hours
Co-op	0	BNS core course 5	4
Elective (online)	4	Capstone	4
		Elective	4
		Elective	4
	4		16

Total Hours: 132

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

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	Vacation	0	Vacation	0
MATH 1251	4	PSYC 3458	4				
PSYC 1101	4	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	Elective	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5						
	19		16		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2301 and BIOL 2302	5	Co-op	0	Co-op	0	CHEM 2313 and CHEM 2314	5
CHEM 2311 and CHEM 2312	5					PSYC 2320	4
PSYC 3200	4						
Elective	4						
EESC 2000	1						
	19		0		0		9

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2309	4	Co-op	0	Co-op	0	Vacation	0
BNS core course 1	4						
Adv PSYC elective	4						
Elective	4						
	16		0		0		0

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DS 2000 and DS 2001	4	Co-op	0	Co-op	0	Elective	4
BNS core course 2	4						
BNS core course 3	4						

Elective	4			
	16	0	0	4
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
BNS core course 4	4	BNS core course 5	4	
Adv BIOL elective	5	Capstone course	4	
ENGW 3307	4	Elective	4	
Elective	4	Elective	4	
	17		16	

Total Hours: 132

## Behavioral Neuroscience and Design, BS

The behavioral neuroscience and design combined major engages students in an interdisciplinary study across the biology, psychology, and Art + Design departments to integrate fundamental design courses with a strong foundation in the physiological brain mechanisms that give rise to behavioral functions. The latest research in neuroscience and psychology enables designers to maximize the impact of their designs and, conversely, complex neuroscientific concepts can be made intelligible to a wider public through creative visual works. Students in this major have the opportunity to learn about the inner workings of the brain and how its various structures interact to enhance their approach to design methodologies. Students can then apply these principles to biomimetic medical devices as well as data and network visualization.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Behavioral Neuroscience Requirements

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
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### Mathematics Foundation

MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	

### Statistics Foundation

Complete one of the following:

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	4-5
or PSYC 2320	Statistics in Psychological Research	

### Behavioral Neuroscience Foundations

PSYC 3200	Clinical Neuroanatomy	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4

### Behavioral Neuroscience Core Courses

Complete two of the following: 8

BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

<sup>1</sup> Students entering through CAMD may take Art and Design at Northeastern (ARTF 1000).

<sup>2</sup> Students entering through CAMD may take Professional Development for Co-op (EEAM 2000).

### Design Requirements

Code	Title	Hours
<b>Foundations</b>		
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
Complete one of the following: 4-5		
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2220	Movement and Time (with optional ARTF 2221)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
<b>Design Courses</b>		
ARTG 1250	Design Process Context and Systems	4

ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 3350	Typography 2	4
ARTG 3451 or ARTG 5330	Information Design 1 Visualization Technologies 1: Fundamentals	4

**Art + Design History**

Complete one of the following:		4
ARTH 1400	The Science of Art, the Art of Science	
ARTH 2210	Modern Art and Design History	
ARTH 2211	Contemporary Art and Design History	
ARTH 2213	Nineteenth-Century Art	

**Degree Capstone Project**

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

Code	Title	Hours
Complete one of the following options:		8

**Interaction Design Option**

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

**Graphic and Information Design Option**

ARTG 2252	Graphic Design 1	
ARTG 3450	Graphic Design 2	

**Experience Design Option**

ARTG 3462	Experience Design 1	
ARTG 3463	Experience Design 2	

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
BIOL 5587	Comparative Neurobiology	4
ARTG 5310	Visual Cognition	4

**Upper-Division Elective**

Complete one course that is not already taken as long as prerequisites have been met:

Any 2000-level or higher ARTG, ARTE, ARTD, ARTH, or ARTS course		4
BNSC 4970 or higher		
BIOL 3403 or higher		
PSYC 3404 or higher		

**Writing Requirements**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3307 or ENGW 3314 or ENGW 3315	Advanced Writing in the Sciences Advanced Writing in the Arts, Media, and Design Interdisciplinary Advanced Writing in the Disciplines	4

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Major Credit Hour Requirement**

104 semester hours in the major.

**Program Requirements**

133 total semester hours required

**Plan of Study****SAMPLE PATTERNS:  
FOUR YEARS, TWO CO-OPS****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000 or ARTF 1000	1	BIOL 2299	4	ARTG 2250	4	PSYC 3452	4
BIOL 1107 and BIOL 1108	5	MATH 1251	4	PSYC 2320	4	General elective	4
CHEM 1161 and CHEM 1162 and CHEM 1163	5	ARTG 1250	4				
PSYC 1101	4	ENGW 1111	4				
ARTF 1122	4						
		19		16		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3458	4	Co-op		Co-op		ARTG 3350	4
BIOL 2301 and BIOL 2302	5					General elective	4
CHEM 2311 and CHEM 2312	5						
A+D foundations 2	4						
EESC 2000 or EEAM 2000	1						
		19		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	Co-op		Co-op		ENGW 3315	4
ARTG 3451 or 5330	4					General elective	4
Design option level 1	4						
BNS core course	4						
		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours
BIOL 5587	4	ARTG 4550	4

ARTG 5310	4	BNS core course	4
Design option level 2	4	Upper-division elective	4
A+D history course	4	General elective	4
	16		16

Total Hours: 134

**FIVE YEARS, THREE CO-OPS**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000 or ARTF 1000	1	BIOL 2299	4	Vacation		Vacation	
PSYC 1101	4	MATH 1251	4				
BIOL 1107 and BIOL 1108	5	ARTG 1250	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5	ENGW 1111	4				
ARTF 1122	4						
	19		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3452	4	Co-op		Co-op		PSYC 2320	4
CHEM 2311 and CHEM 2312	5					ARTG 3350	4
ARTG 2250	4						
A+D foundations 2	4						
EESC 2000 or EEAM 2000	1						
	18		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	Co-op		Co-op		Vacation	
PSYC 3458	4						
BIOL 2301 and BIOL 2302	5						
Design option level 1	4						
	17		0		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTG 3451 or 5330	4	Co-op		Co-op		ENGW 3315	4

Design option level 2	4			General elective	4
BNS core course	4				
General elective	4				
	16		0		0
					8

**Year 5**

Fall	Hours	Spring	Hours
BIOL 5587	4	ARTG 4550	4
ARTG 5310	4	BNS core course	4
A+D history course	4	Upper-division elective	4
General elective	4	General elective	4
	16		16

Total Hours: 134

**Behavioral Neuroscience and Philosophy, BS**

The behavioral neuroscience and philosophy combined degree program engages students in the interdisciplinary study across the biology, psychology, and philosophy departments. The major provides rigorous training in both disciplines with a specific focus on understanding seminal questions concerning human nature and the mind. Courses in the basic sciences will lay a strong foundation in biology, chemistry, and data analytics that are relevant to neuroscience. In behavioral neuroscience core courses, students will examine the structure and function of the human nervous system in order to explore brain mechanisms that give rise to behavioral functions, including cognitive processes, as well as pathological states. In philosophy courses, successful students will develop core analytics skills, including ethical reasoning; learn to recognize and question deep theoretical assumptions at the heart of scientific theories and practice; and explore the social and ethical dimensions of neuroscience and scientific practice more broadly. The fields of behavioral neuroscience and philosophy are further bridged with course work that is designed to enable students to apply neuroscientific concepts to philosophical, moral, and ethical questions.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).



**Behavioral Neuroscience Requirements**

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
or PSYC 2320	Statistics in Psychological Research	
<b>Behavioral Neuroscience Foundation</b>		
PSYC 3200	Clinical Neuroanatomy	4
PSYC 3458	Biological Psychology	4
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 1214	The Moral Mind: The Science Underlying Ethical Decision-Making and Virtuous Character	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	

PSYC 3506	Neuropsychology of Fear
PSYC 3508	Behavioral Endocrinology
PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

**Upper-Division Elective**

Complete one course that is not already taken as long as pre-requisites have been met:	4
BNSC 4970 or higher	
BIOL 3403 or higher	
PSYC 3404 or higher	

<sup>1</sup> Students entering through CSSH may take Philosophy at Northeastern (PHIL 1000).

<sup>2</sup> Students entering through CSSH may take Professional Development for Co-op (EESH 2000).

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Foundation</b>		
PHIL 1105	Science and Pseudoscience	4
or PHIL 2050	Information and Uncertainty	
PHIL 1115	Introduction to Logic	4
PHIL 1145	Technology and Human Values	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy Restricted Electives</b>		
Complete eight credits from the following list, not taken to fulfill other requirements:		8
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	

**Additional Electives**

Complete two additional PHIL courses, not taken to fulfill other requirements.	8
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**Integrative Requirements**

Code	Title	Hours
BIOL 4709	Neurobiology of Learning and Memory	4
or BIOL 5587	Comparative Neurobiology	
PHIL 4535	Philosophy of Mind	4
or PHIL 4555	Philosophy of Biology	

**Writing Courses**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

ENGW 3307	Advanced Writing in the Sciences	4
or ENGW 3308	Advanced Writing in the Social Sciences	
or ENGW 3309	Advanced Writing in the Humanities	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Behavioral Neuroscience GPA Requirement**

A minimum 2.000 GPA in all behavioral neuroscience courses is required.

**Combined-Major Credit Hour Requirement**

96 total semester hours required in major.

**Program Requirement**

130 total semester hours required

**Plan of Study**

**SAMPLE PATTERNS:  
5 YEARS, 3 CO-OPS**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	Vacation		Vacation	
BIOL 1107 and BIOL 1108	5	BIOL 2299	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5	MATH 1251	4				
PSYC 1101	4	PSYC 3458	4				
PHIL 1145	4						
		19	16	0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	EESC 2000	1	Vacation		Co-op	
BIOL 2301 and BIOL 2302	5	CHEM 2311 and CHEM 2312	5				
PHIL 1105	4	PSYC 2320	4				
PHIL 1115	4	PHIL 2330	4				
		PHIL restricted elective	4				
		17	18	0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL restricted elective	4	PHIL 2325	4	Co-op	
		BNS core course	4	General elective	4		
		PSYC elective	4				

General elective	4				
		0	16	8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BIOL 4709 or 5587	4	Vacation		Co-op	
		BNS core course	4			ENGW 3315 (online)	4
		PHIL elective	4				
		General elective	4				
		0	16	0		4	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		PHIL 4535 or 4555	4
		PHIL elective	4
		BNS upper-level elective	4
		General elective	4
		0	16

Total Hours: 130

**4 YEARS, 2 CO-OPS**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	PHIL 2325	4	Vacation	
BIOL 1107 and BIOL 1108	5	BIOL 2299	4	PSYC elective	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5	MATH 1251	4				
PSYC 1101	4	PSYC 3458	4				
PHIL 1145	4						
		19	16	8		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	EESC 2000	1	PSYC 2320	4	Co-op	
BIOL 2301 and BIOL 2302	5	CHEM 2311 and CHEM 2312	5	General elective	4		
PHIL 1115	4	PHIL 2330	4				
PHIL 1105	4	PHIL restricted elective	4				
		BNS core course	4				
		17	18	8		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BNS core course	4	PHIL elective	4	Co-op	

PHIL restricted elective	4	General elective	4	ENGW 3315 (online)	4
PHIL elective	4				
General elective	4				
	0	16	8		4

**Year 4**

Fall	Hours	Spring	Hours
Co-op		BIOL 4709 or 5587	4
		PHIL 4535 or 4555	4
		BNS upper-level elective	4
		General elective	4
	0	16	

Total Hours: 130

## Computer Science and Behavioral Neuroscience, BS

The Bachelor of Science in Computer Science and Behavioral Neuroscience underscores how research in neuroscience has become a computational field of study. The combined major is designed for students who are interested in applying mathematical and computational methodologies toward understanding human behavior, artificial intelligence, and the human-machine interface. Courses across multiple science disciplines—including biology, chemistry, and computer science—lay a strong foundation necessary to explore brain mechanisms and how they give rise to behavioral functions and pathological states using computational approaches. Students will have an opportunity to develop skills in software development as they apply algorithms and data structures to brain research and neurotechnology.

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Computer Science Requirements

Code	Title	Hours
<b>Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 4100	Artificial Intelligence	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Supporting Course for Computer Science

THTR 1170	The Eloquent Presenter	1
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### Statistics Foundation

Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
PSYC 2320	Statistics in Psychological Research	

<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000).

<sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).

### Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405	Neurobiology	4

or BIOL 5587	Comparative Neurobiology	
PT 5410 and PT 5411	Functional Human Neuroanatomy and Lab for PT 5410	4-5
or PSYC 3200	Clinical Neuroanatomy	

**Psychology Elective**

Complete one of the following:		4
PSYC 3358	Behavior Therapies	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	

**Behavioral Neuroscience Core Courses**

Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
IS 4300	Human Computer Interaction	4
or CS 4120	Natural Language Processing	
or CS 4180	Reinforcement Learning	
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4
or BINF 6308	Bioinformatics Computational Methods 1	

**Upper-Division Elective**

Complete four credits from the following list, not taken to fulfill previous requirements:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
BNSC 4970 or higher		
BIOL 3400 or higher		

BINF 6309	Bioinformatics Computational Methods	2
PSYC 3200 or higher		

**Supporting Courses**

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Computer Science and Behavioral Neuroscience Major Credit Requirement**

103 SH required in the major

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns: Five Years, Three Co-ops**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation
CS 1800 and CS 1802	5	BIOL 2299	4			
CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5			
BIOL 1107 and BIOL 1108	5	MATH 1341	4			
ENGW 1111	4					
		20			18	0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3500	4	CS 3000	4	Vacation		Co-op

BIOL 3405 or 5587	4	CHEM 2311 and CHEM 2312	5
PSYC 1101	4	PSYC 3200	4
BIOL 2301 and BIOL 2302	5	General elective	4
		CS 1210	1
		17	18
		0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3200	4	General elective		4	Co-op
		CS 4500	4	PSYC elective		4	
		THTR 1170	1				
		Statistics requirement	4				
		BNS core	4				
		0	17	8			0

**Year 4**

Fall	Hours	Spring	Hours	Summer 2	Hours
Co-op		CS 4100	4	Co-op	
		CS integrative course	4	ENGW 3302 (online)	4
		BNS core	4		
		General elective	4		
		0	16		

**Year 5**

Fall	Hours	Spring	Hours
Co-op		Upper-division elective	4
		BNS integrative course	4
		Computing and social issues	4
		General elective	4
		0	16

Total Hours: 134

**Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	MATH 1341	4	PSYC 1101	4		
CS 2500 and CS 2501	5	BIOL 2299	4				

BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5
ENGW 1111	4		
		20	18
		8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	PSYC elective		4	Co-op
CS 3000	4	CHEM 2311 and CHEM 2312	5	General elective		4	
BIOL 3405 or 5587	4	PSYC 3200	4				
BIOL 2301 and BIOL 2302	5	General elective	4				
		Statistics course	4				
		17	18	8			0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		THTR 1170	1	General elective		4	Co-op
		CS 4500	4	Upper-division elective		4	ENGW 3302 (online)
		BNS core	4				
		CS integrative course	4				
		BNS core	4				
		0	17	8			4

**Year 4**

Fall	Hours	Spring	Hours
Co-op		CS 4100	4
		Computing and social issues	4
		BNS integrative course	4
		General elective	4
		0	16

Total Hours: 134

**Data Science and Behavioral Neuroscience, BS**

The data science and behavioral neuroscience major combines the disciplines of biology, psychology, computer science, and data science into an integrated curriculum. The human brain is a complex information processing system requiring scientists to analyze, integrate, and share large data sets garnered from multiple techniques that image and record the activity of the brain at work. Students investigate the anatomy and physiology of neural circuits that underlie brain mechanisms and

pathological states that give rise to behavioral functions. Students have an opportunity to develop skills in large-scale data manipulation and storage, machine learning, data mining, and information visualization necessary to execute big brain-mapping initiatives including human neuroconnectivity maps.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	1
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	1
<b>Computer Science Foundations</b>		
A grade of C– or higher is required in all computer science foundations courses except CS 1802:		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Supporting Course for Data Science</b>		
THTR 1170	The Eloquent Presenter	1
<b>Statistics Foundation</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
PSYC 2320	Statistics in Psychological Research	

<sup>1</sup> Students entering through the behavioral neuroscience program may take Behavioral Neuroscience at Northeastern (BNSC 1000).

<sup>2</sup> Students entering through the behavioral neuroscience program may take Professional Development for Co-op (EESC 2000).

## Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

## Behavioral Neuroscience Requirements

Code	Title	Hours
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
or MATH 1251	Calculus and Differential Equations for Biology 1	
<b>Behavioral Neuroscience Foundations</b>		
BIOL 3405	Neurobiology	4
or BIOL 5587	Comparative Neurobiology	
PT 5410 and PT 5411	Functional Human Neuroanatomy and Lab for PT 5410	4-5
or PSYC 3200	Clinical Neuroanatomy	
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3358	Behavior Therapies	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	



BIOL 3605	Developmental Neurobiology
BIOL 4705	Neurobiology of Cognitive Decline
BIOL 4709	Neurobiology of Learning and Memory
BIOL 5595	Cell and Molecular Neuroscience
BIOL 5601	Multidisciplinary Approaches in Motor Control
PSYC 3506	Neuropsychology of Fear
PSYC 3508	Behavioral Endocrinology
PSYC 3510	Brain, Behavior, and Immunity
PSYC 4510	Psychopharmacology
PSYC 4512	Neuropsychology
PSYC 4514	Clinical Neuroscience
PSYC 4570	Behavioral Genetics

### Integrative Requirements

**Code Title Hours**

#### Integrative Courses

PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4
or BINF 6308	Bioinformatics Computational Methods 1	
CS 4100	Artificial Intelligence	4

#### Upper-Division Elective

Complete four credits from the following list, not taken to fulfill previous requirements: 4

CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	
BNSC 4970 or higher	
BIOL 3400 or higher	
BINF 6309	Bioinformatics Computational Methods 2
PSYC 3200 or higher	

### Required General Electives

**Code Title Hours**

Complete 16 credits of general electives. 16

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Five Years, Three Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4				

CS 2500 and CS 2501	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1107 and BIOL 1108	5	MATH 1341	4				
ENGW 1111	4						
		20	18	0	0		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation		Co-op	
BIOL 3405 or 5587	4	CS 3200	4				
PSYC 1101	4	CHEM 2311 and CHEM 2312	5				
BIOL 2301 and BIOL 2302	5	CS 1210	1				
		PSYC 2320	4				
		17	18	0	0		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4200	4	General elective		4 Co-op	
		BNS foundation	4	PSYC elective		4	
		General elective	4				
		PSYC 3200	4				
		THTR 1170	1				
		0	17	8	0		

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	Vacation		Co-op	
		BNS integrative course	4			ENGW 3315 (online)	4
		BNS foundation	4				
		General elective	4				
		0	16	0	0		4

#### Year 5

Fall	Hours	Spring	Hours
Co-op		DS 4400	4
		CS 4100	4
		Integrative advanced elective	4
		General elective	4
		0	16

Total Hours: 134

**Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	MATH 1341	4	PSYC 1101	4		
CS 2500 and CS 2501	5	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
ENGW 1111	4						
	20		18		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	CS 1210	1	PSYC elective	4	Co-op	
DS 3000	4	DS 4200	4	General elective	4		
BIOL 3405 or 5587	4	CHEM 2311 and CHEM 2312	5				
BIOL 2301 and BIOL 2302	5	BNS foundation	4				
		PSYC 2320	4				
	17		18		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	General elective	4	Co-op	
		THTR 1170	1	Integrative advanced elective	4	ENGW 3315 (online)	4
		BNS foundation	4				
		PSYC 3200	4				
		General elective	4				
	0		17		8		4

Year 4			
Fall	Hours	Spring	Hours
Co-op		DS 4400	4
		CS 4100	4
		BNS integrative course	4
		General elective	4
	0		16

Total Hours: 134

**Behavioral Neuroscience, Minor**

The behavioral neuroscience minor allows all students, including those majoring in biology and psychology, the opportunity to complement their major plans of study with an interdisciplinary minor in behavioral neuroscience.

**Minor Requirements**

Students are required to take one intermediate course followed by four behavioral neuroscience core courses, two from each of the parent departments of the discipline (i.e., psychology and biology).

**Intermediate Course**

Code	Title	Hours
PSYC 3458 or BIOL 3405	Biological Psychology Neurobiology	4

**Psychology Core Courses**

Code	Title	Hours
Complete two of the following:		8
PSYC 3200	Clinical Neuroanatomy	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	

**Biology Core Courses**

Code	Title	Hours
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 4709	Neurobiology of Learning and Memory	
BIOL 5587	Comparative Neurobiology	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	

**Credit/GPA Requirement**

20 total semester hours required  
2.000 GPA required in the minor

**Biochemistry**

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

**Kirsten Fertuck, PhD**

Associate Teaching Professor and Program Director

203 Mugar Life Sciences Building  
617.373.2852

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 coursework that is designed to prepare you to interpret the ever-expanding knowledge base and hands-on learning that positions you to leverage cutting-edge technology to solve fundamental problems in the chemistry of life.

After required basic coursework in biochemistry, biology, chemistry, physics, and mathematics, our majors select elective courses that reflect many areas of biochemistry including neuroscience, bioorganic chemistry, stem cell and regenerative biology, microbial biotechnology, and systems biology and engineering.

In our interdisciplinary program, students take advantage of faculty-mentored research guided by investigators from bioengineering, biology, chemical engineering, chemistry, pharmaceutical sciences, physics, psychology, and other academic units.

Northeastern's signature co-op program provides complementary opportunities in world-class biotechnology companies, hospitals, and research facilities as close as Boston and as far as your global interest takes you.

Our biochemistry program 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

### Bachelor of Science (BS)

- Biochemistry (p. 578)
- Data Science and Biochemistry (p. 384)

### Bachelor of Science in Bioengineering (BSBioE)

- Bioengineering and Biochemistry (p. 423)

### Bachelor of Science in Chemical Engineering (BSCHE)

- Chemical Engineering and Biochemistry (p. 432)

## Minor

- Biochemistry, Minor (p. 590)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Biochemistry, BS

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

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 hands-on learning that positions you to leverage cutting-edge technology to solve fundamental problems in the chemistry of life.

After required basic course work in biochemistry, biology, chemistry, physics, and mathematics, our majors select elective courses that reflect many areas of biochemistry including neuroscience, bioorganic chemistry, stem cell and regenerative biology, microbial biotechnology, and systems biology and engineering.

In our interdisciplinary program, students take advantage of faculty-mentored research guided by investigators from bioengineering, biology, chemical engineering, chemistry, pharmaceutical sciences, physics, psychology, and other academic units.

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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Biochemistry Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOC 1000	Biochemistry at Northeastern	1
<b>Biology Foundations</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Techniques</i>		
BIOL 2309	Biology Project Lab	4
<b>Genetics and Molecular Biology</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>General Chemistry</b>		
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
<b>Organic Chemistry 1</b>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Organic Chemistry 2</b>		

CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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**Physical Chemistry**

CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5
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**Biochemistry Courses**

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
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BIOL 4707	Cell and Molecular Biology	4
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Complete one of the following: 4-5

CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	
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CHEM 4620	Introduction to Protein Chemistry	
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CHEM 5620	Protein Chemistry	
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**Experiential Learning Introduction**

EESC 2000	Professional Development for Co-op	1
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**Capstone**

Please complete one of the following options to fulfill the capstone requirement: 4-5

BIOC 4971	Junior/Senior Honors Project 2	
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BIOC 4991 and BIOC 4900	Research and Biochemistry Capstone	
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BIOL 4701	Biology Capstone	
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BIOL 4991 and BIOC 4900	Research and Biochemistry Capstone	
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CHEM 4750	Senior Research	
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CHEM 4991 and BIOC 4900	Research and Biochemistry Capstone	
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**Biology and Chemistry Advanced Electives**

Code	Title	Hours
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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.

**Biology**

BIOL 2311 to BIOL 5999		
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**Chemistry**

CHEM 2310 to CHEM 5999		
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**Research Option**

Up to 4 semester hours may be research in a biology or chemistry faculty lab:

BIOC 4991	Research	
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BIOC 4970	Junior/Senior Honors Project 1	
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BIOC 4971	Junior/Senior Honors Project 2	
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BIOC 4994	Internship	
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BIOL 4991	Research	
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BIOL 4970	Junior/Senior Honors Project 1	
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CHEM 4901	Undergraduate Research	
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CHEM 4750	Senior Research	
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CHEM 4970	Junior/Senior Honors Project 1	
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**Biochemistry Breadth Courses**

A minimum GPA of 2.000 is required for the biochemistry breadth courses.

Code	Title	Hours
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**Mathematics Courses**

Complete one of the following options: 8

*Option 1*

MATH 1251	Calculus and Differential Equations for Biology 1	
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MATH 1252	Calculus and Differential Equations for Biology 2	
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*Option 2*

MATH 1341	Calculus 1 for Science and Engineering	
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MATH 1342	Calculus 2 for Science and Engineering	
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**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	
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PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
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PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
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PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
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*Physics 2*

Complete a lecture and lab set for Physics 2: 5

PHYS 1175 and PHYS 1176 and PHYS 1177	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175	
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PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
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PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
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**Intermediate or Advanced Science**

Complete one course from the following: 4-5

BIOL 2301 to BIOL 5999		
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CHEM 2311 to CHEM 5999		
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EEMB 2290 to EEMB 5999		
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ENVR 2310 to ENVR 5999		
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MATH 2280 to MATH 5999		
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PHYS 2303 to PHYS 5999		
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PSYC 2290 to PSYC 5999		
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**Biochemistry Major Credit/GPA Requirements**

Complete 89 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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1107	4	BIOL 2299	4	BIOL 2301	4	Elective 3	4
BIOL 1108	1	CHEM 2311	4	BIOL 2302	1	Elective 4	4
CHEM 1161	4	CHEM 2312	1	Elective 2	4		
CHEM 1162	1	MATH 1252	4				
CHEM 1163	0	ENGW 1111	4				
MATH 1251	4						
Elective 1	4						
BIOC 1000	1						
	19		17		9		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2309	4	BIOL 3611	4	BIOL 4707	4	Co-op	
CHEM 2313	4	BIOL 3612	1	Elective 8	4		
CHEM 2314	1	PHYS 1155	3				
PHYS 1151	3	PHYS 1156	1				
PHYS 1152	1	PHYS 1157	1				
PHYS 1153	1	Elective 6	4				
Elective 5	4	Elective 7	4				
		EESC 2000	1				
	18		19		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CHEM 3431	4	Elective 10	4	Co-op	
		CHEM 3432	1	COS adv elective	4		
		CHEM 4620 (or CHEM 2331 and CHEM 2332)	4				
		ENGW 3307	4				
		Elective 9	4				
	0		17		8		0

#### Year 4

Fall	Hours	Spring	Hours
Co-op		BIOL or CHEM advanced elective	5
		BIOL or CHEM advanced elective	5

BIOL or CHEM advanced elective 5

CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxxx4991+BIC 4900) 4

0 19

Total Hours: 142

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1107	4	BIOL 2299	4	BIOL 2301	4	Elective 3	4
BIOL 1108	1	CHEM 2311	4	BIOL 2302	1	Elective 4	4
CHEM 1161	4	CHEM 2312	1	Elective 2	4		
CHEM 1162	1	ENGW 1111	4				
CHEM 1163	0	MATH 1252	4				
MATH 1251	4						
Elective 1	4						
BIOC 1000	1						
	19		17		9		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2309	4	Co-op		Co-op		BIOL 3611	4
CHEM 2313	4					BIOL 3612	1
CHEM 2314	1					Elective 6	4
PHYS 1151	3						
PHYS 1152	1						
PHYS 1153	1						
Elective 5	4						
EESC 2000	1						
	19		0		0		9

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COS adv elective	4	Co-op		Co-op		BIOL 4707	4
PHYS 1155	3					Elective 8	4
PHYS 1156	1						
PHYS 1157	1						
ENGW 3307	4						
Elective 7	4						
	17		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
CHEM 3431	4	BIOL or CHEM advanced elective	5

CHEM 3432	1 BIOL or CHEM advanced elective	5		
CHEM 4620 (or CHEM 2331 and CHEM 2332)	4 CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxxx4991+BIOC 4900)	4		
BIOL or CHEM advanced elective	5 Elective 10	4		
Elective 9	4			
	18	18		

Total Hours: 142

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1107	4	BIOL 2299	4	BIOL 2301	4	Vacation	
BIOL 1108	1	CHEM 2311	4	BIOL 2302	1		
CHEM 1161	4	CHEM 2312	1	Elective 2	4		
CHEM 1162	1	MATH 1252	4				
CHEM 1163	0	ENGW 1111	4				
MATH 1251	4						
Elective 1	4						
BIOC 1000	1						
	19		17		9		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2309	4	BIOL 3611	4	COS adv elective	4	Co-op	
CHEM 2313	4	BIOL 3612	1	Elective 6	4		
CHEM 2314	1	PHYS 1155	3				
PHYS 1151	3	PHYS 1156	1				
PHYS 1152	1	PHYS 1157	1				
PHYS 1153	1	Elective 4	4				
Elective 3	4	Elective 5	4				
		EESC 2000	1				
	18		19		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BIOL 4707	4	Vacation		Co-op	
		CHEM 3431	4				
		CHEM 3432	1				
		ENGW 3307	4				
		Elective 7	4				
	0		17		0		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CHEM 4620 (or CHEM 2331 and CHEM 2332)	4	Vacation		Co-op	
		BIOL or CHEM advanced elective		5			
		Elective 8	4				
		Elective 9	4				
	0		17		0		0

#### Year 5

Fall	Hours	Spring	Hours
Co-op		BIOL or CHEM advanced elective	5
		BIOL or CHEM advanced elective	5
		CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxxx4991+BIOC 4900)	4
		Elective 10	4
	0		18

Total Hours: 142

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1107	4	BIOL 2299	4	BIOL 2301	4	Vacation	
BIOL 1108	1	CHEM 2311	4	BIOL 2302	1		
CHEM 1161	4	CHEM 2312	1	Elective 2	4		
CHEM 1162	1	MATH 1252	4				
CHEM 1163	0	ENGW 1111	4				
MATH 1251	4						
Elective 1	4						
BIOC 1000	1						
	19		17		9		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2309	4	Co-op		Co-op		BIOL 3611	4
CHEM 2313	4					BIOL 3612	1
CHEM 2314	1					Elective 4	4
PHYS 1151	3						
PHYS 1152	1						
PHYS 1153	1						
Elective 3	4						
EESC 2000	1						
	19		0		0		9



**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COS adv elective	4	Co-op		Co-op		Vacation	
PHYS 1155	3						
PHYS 1156	1						
PHYS 1157	1						
ENGW 3307	4						
Elective 5	4						
	17		0		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 4707	4	Co-op		Co-op		Vacation	
CHEM 3431	4						
CHEM 3432	1						
CHEM 4620 (or CHEM 2331 and CHEM 2332)	4						
Elective 6	4						
	17		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
BIOL or CHEM advanced elective	5	BIOL or CHEM advanced elective	5
BIOL or CHEM advanced elective	5	CHEM 4750 (or BIOL 4701 or BIOC 4971 or xxx4991+BIC 4900)	4
Elective 7	4	Elective 9	4
Elective 8	4	Elective 10	4
	18		17

Total Hours: 142

## Bioengineering and Biochemistry, BSBioE

This combined major from the College of Engineering and College of Science serves students who wish to develop both a scientific and an engineering mindset to solve problems in bioengineering and biochemistry. The program includes fundamentals and electives in the science of biochemistry; a complete and rigorous bioengineering core; and a series of molecular, cellular, and tissue engineering courses that allow for synthesis of the two. Successful graduates will earn a Bachelor of Science degree and possess the knowledge, skills, and perspective to pursue careers in academia or industry. Furthermore, this curriculum lines up well with the coursework required to pursue medical (or other clinical) school.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

**Engineering**

Code	Title	Hours
<b>Required Engineering</b>		
BIOE 2350	Biomechanics	4
BIOE 2355	Quantitative Physiology for Bioengineers	4
BIOE 2365 and BIOE 2366	Bioengineering Measurement, Experimentation, and Statistics and Lab for BIOE 2365	5
BIOE 3210	Bioelectricity	4
BIOE 3310	Transport and Fluids for Bioengineers	4
BIOE 3380	Biomolecular Dynamics and Control	4
<b>Bioengineering Capstone</b>		
BIOE 4790	Capstone Design 1	4
BIOE 4792	Capstone Design 2	4
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
GE 1501	Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:		3
GE 1502	Cornerstone of Engineering 2	

**Concentration****Concentration in Cell and Tissue Engineering**

Code	Title	Hours
<b>Required Courses</b>		
BIOE 5410	Molecular Bioengineering	4
BIOE 5420	Cellular Engineering	4
BIOE 5430	Principles and Applications of Tissue Engineering	4

**Mathematics/Science Requirement**

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 1115 and BIOL 1116 or BIOL 1111 and BIOL 1112	General Biology 1 for Engineers and Lab for BIOL 1115 and Lab for BIOL 1111	5
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1171 and PHYS 1172 and PHYS 1173	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171	5
or PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1175 and PHYS 1176 and PHYS 1177	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175	5
or PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

**Advanced Biology Elective**

Complete one course in the following range: 4

BIOL 2311 to BIOL 5999

**Advanced Chemistry Elective**

Complete one course in the following range: 4

CHEM 2310 to CHEM 5999

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501 Cornerstone of Engineering 1

**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501 Cornerstone of Engineering 1

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502 Cornerstone of Engineering 2

**Writing Requirements**

Code	Title	Hours
ENGW 1111	First-Year Writing	4

A grade of C or higher is required:

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3307	Advanced Writing in the Sciences	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 12 semester hours of academic, nonremedial, nonrepetitive courses.	12

**Integrative Course**

Code	Title	Hours
BIOE 4790	Capstone Design 1	4

**Major GPA Requirement**

2.000 minimum required in BIOE courses

**Program Requirement**

139 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
Students will need to have AP credit for Calc. AB (MATH1341-Calculus 1, 4 SH)	4	GE 1502 (ER)	4	PHYS 1155 or 1175 (ND)	3	Vacation	
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	PHYS 1156 or 1176 (AD)	1		
CHEM 1153	0	PHYS 1171 or 1151 (ND)	3	PHYS 1157 or 1177	1		
ENGW 1111 (WF)	4	PHYS 1172 or 1152 (AD)	1	General elective	4		
GE 1000	1	PHYS 1173 or 1153	1				
GE 1501	4	General elective	4				
MATH 1342 (FQ)	4						
	21		17		9		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2355	4	BIOE 2350	4	CHEM 2313	4	Co-op	
BIOE 2365 (AD, WI)	4	BIOE 3380	4	CHEM 2314	1		
BIOE 2366	1	BIOL 2301 (ND)	4	General elective	4		
BIOL 1115 or 1111 (ND)	4	BIOL 2302 (AD)	1				
BIOL 1116 or 1112	1	CHEM 2311	4				
MATH 2341	4	CHEM 2312	1				

		ENCP 2000	1				
		18	19	9	0		
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		BIOE 3210	4	BIOE 3310	4	Co-op	
		BIOE 5410, 5420, or 5430	4	BIOE 4790 (EI, CE, WI)	4		
		BIOE 5420, 5410, or 5430	4				
		BIOL 3611	4				
		BIOL 3612 (WI)	1				
		ENCP 3000	1				
		0	18	8	0		
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op		BIOE 4792 (EI, CE, WI)	4				
ENGW 3302, 3307, or 3315 (to be taken online) (WD)	4	BIOE 5430, 5410, or 5420	4				
		Advanced BIOL elective	4				
		Advanced CHEM elective	4				
		4	16				

Total Hours: 139

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

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Students will need to have AP credit for Calc. AB (MATH1341-Calculus 1, 4 SH)	4	GE 1502 (ER)	4	PHYS 1155 or 1175 (ND)	3	Vacation	
CHEM 1151 (ND)	4	MATH 2321 (FQ)	4	PHYS 1156 or 1176 (AD)	1		
CHEM 1153	0	PHYS 1171 or 1151 (ND)	3	PHYS 1157 or 1177	1		
ENGW 1111 (WF)	4	PHYS 1172 or 1152 (AD)	1	General elective	4		
GE 1000	1	PHYS 1173 or 1153	1				
GE 1501	4	General elective	4				
MATH 1342 (FQ)	4						
		21	17	9	0		

### Year 2

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
BIOE 2365 (AD, WI)	4	Co-op		Co-op		CHEM 2313	4
BIOE 2366	1					CHEM 2314	1
BIOL 1115 or 1111 (ND)	4					General elective	4
BIOL 1116 or 1112	1						
CHEM 2311	4						
CHEM 2312	1						
ENCP 2000	1						
MATH 2341	4						
		20	0	0	9		

### Year 3

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
BIOE 2350	4	Co-op		Co-op		BIOE 3310	4
BIOE 2355	4	ENGW 3302, 3307, or 3315 (to be taken online) (WD)	4			BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4						
BIOL 2301 (ND)	4						
BIOL 2302 (AD)	1						
ENCP 3000	1						
		18	4	0	8		

### Year 4

<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
BIOE 3210	4	BIOE 5420, 5410, or 5430	4				
BIOE 4792 (EI, CE, WI)	4	BIOE 5430, 5410, or 5420	4				
BIOE 5410, 5420, or 5430	4	Advanced BIOL elective	4				
BIOL 3611	4	Advanced CHEM elective	4				
BIOL 3612 (WI)	1						
		17	16				

Total Hours: 139

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

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4				
ENGW 1111 (WF)	4	PHYS 1171 or 1151 (ND)	3				

GE 1501	4	PHYS 1172 or 1152 (AD)	1		
GE 1000	1	PHYS 1173 or 1153	1		
MATH 1341 (FQ)	4	General elective	4		
	17		17	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2365 (AD, WI)	4	BIOE 2355	4	Vacation	0	Co-op	0
BIOE 2366	1	BIOL 2301 (ND)	4				
BIOL 1115 or 1111 (ND)	4	BIOL 2302 (AD)	1				
BIOL 1116 or 1112	1	CHEM 2311	4				
MATH 2321 (FQ)	4	CHEM 2312	1				
PHYS 1175 or 1155 (ND)	3	ENCP 2000	1				
PHYS 1176 or 1156 (AD)	1	MATH 2341	4				
PHYS 1177 or 1157	1						
	19		19	0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOE 2350	4	BIOE 3310	4	Co-op	0
		BIOE 3380	4	BIOL 3611	4		
		CHEM 2313	4	BIOL 3612 (WI)	1		
		CHEM 2314	1				
		ENGW 3302, 3307, or 3315 (WD)	4				
	0		17	9		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOE 3210	4	BIOE 4790 (EI, CE, WI)	4	Co-op	0
		BIOE 5410, 5420, or 5430	4	General elective	4		
		ENCP 3000	1				
		Advanced BIOL or CHEM elective	4				
		General elective	4				
	0		17	8		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	BIOE 4792 (EI, CE, WI)	4

	BIOE 5420, 5410, or 5430	4
	BIOE 5430, 5410, or 5420	4
	Advanced BIOL or CHEM elective	4
		16

Total Hours: 139

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation		Vacation	
CHEM 1153	0	MATH 1342 (FQ)	4				
GE 1000	1	PHYS 1171 or 1151 (ND)	3				
GE 1501	4	PHYS 1172 or 1152 (AD)	1				
ENGW 1111 (WF)	4	PHYS 1173 or 1153	1				
MATH 1341 (FQ)	4	General elective	4				
	17		17	0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2365 (AD, WI)	4	Co-op		Co-op		Vacation	
BIOE 2366	1						
BIOL 1115 or 1111 (ND)	4						
BIOL 1116 or 1112	1						
ENCP 2000	1						
MATH 2321 (FQ)	4						
PHYS 1175 or 1155 (ND)	3						
PHYS 1176 or 1156 (AD)	1						
PHYS 1177 or 1157	1						
	20		0	0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 2350	4	Co-op		Co-op		BIOE 3310	4
BIOE 2355	4					CHEM 2313	4
CHEM 2311	4					CHEM 2314	1
CHEM 2312	1						
MATH 2341	4						
	17		0	0			9

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOE 3210	4	Co-op		Co-op		BIOE 4790 (EI, CE, WI)	4
BIOE 3380	4					General elective	4
BIOL 2301 (ND)	4						
BIOL 2302 (AD)	1						
ENGW 3302, 3307, or 3315 (WD)	4						
	17		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
BIOE 4792 (EI, CE, WI)	4	BIOE 5420, 5410, or 5430	4
BIOE 5410, 5420, or 5430	4	BIOE 5430, 5410, or 5420	4
BIOL 3611	4	Advanced BIOL elective	4
BIOL 3612 (WI)	1	Advanced CHEM elective	4
ENCP 3000	1		
General elective	4		
	18	16	

Total Hours: 139

## Chemical Engineering and Biochemistry, BSCHE

This intercollege combined major serves students who would like to explore their interest in biochemistry while earning the benefit of a Bachelor of Science degree in chemical engineering. The program combines the fundamentals of biochemistry with the engineering skills necessary for scale-up of biochemical processes. 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
CHME 4512	Chemical Engineering Process Control	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4

### Supplemental Credit

2 semester hours from the following course count toward the engineering requirement:	2
GE 1501 Cornerstone of Engineering 1	
3 semester hours from the following course count toward the engineering requirement:	3
GE 1502 Cornerstone of Engineering 2	

### Mathematics/Science Requirement

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
BIOL 4707	Cell and Molecular Biology	4
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
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**Advanced Biology Elective**

Complete one course in the following range: BIOL 2311 to BIOL 5999	4
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**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: GE 1501	Cornerstone of Engineering 1	1
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**Advanced Science Requirement**

Code	Title	Hours
BIOL 1115	General Biology 1 for Engineers	4
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2321 and CHEM 2322 or CHEM 2331 and CHEM 2332	Analytical Chemistry and Lab for CHEM 2321 Bioanalytical Chemistry and Lab for CHEM 2331	5

**Advanced Chemistry Elective**

Complete one course in the following range: CHEM 2310 to CHEM 5999	4
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**Professional Development**

Code	Title	Hours
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: GE 1501	Cornerstone of Engineering 1	1
1 semester hour from the following course counts toward the professional development requirement: GE 1502	Cornerstone of Engineering 2	1

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302 or ENGW 3307 or ENGW 3315	Advanced Writing in the Technical Professions Advanced Writing in the Sciences Interdisciplinary Advanced Writing in the Disciplines	4

**Required General Electives**

Code	Title	Hours
Complete 16SH of academic, nonremedial, nonrepetitive courses.		16

Major GPA Requirement

2.000 minimum required in CHME courses

**Program Requirement**

145 total semester hours required

**Plan of Study**

**Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	MATH 2321 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
		17	17	8	0		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 (ND)	4	CHEM 2313	4	BIOL 2301 (ND)	4	Vacation	0
CHEM 2311	4	CHEM 2314	1	BIOL 2302 (AD)	1		
CHEM 2312	1	CHEM 2321 (AD, WI)	4	General Elective	4		
CHME 2310	4	CHEM 2322	1				
MATH 2341	4	CHME 2320	4				
		ENCP 2000	1				
		General Elective	4				
		17	19	9	0		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	CHME 4315 (AD, WI)	4	BIOL 3611	4	Co-op	0
CHME 3315 (AD)	4	CHME 4316	0	BIOL 3612 (WI)	1		
CHME 3316	0	CHME 4510	4	General Elective	4		
CHME 3322	4	CHME 4701	4				
ENGW 3302, 3307, or 3315 (WD)	4	Advanced Chemistry Elective	4				
		16	16	9	0		
Year 4							
Fall	Hours	Spring	Hours				
Co-op	0	BIOL 4707	4				
		CHME 4512	4				
		CHME 4703 (EI, CE, WI)	4				
		CHME 4705	0				



ENCP 3000	1
Advanced Biology Elective	4
0	17

Total Hours: 145

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

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	GE 1502 (ER)	4	CHME 2308	4	Vacation	0
CHEM 1153	0	MATH 1342 (FQ)	4	MATH 2321 (FQ)	4		
ENGW 1111 (WF)	4	PHYS 1151 (ND)	3				
GE 1000	1	PHYS 1152 (AD)	1				
GE 1501	4	PHYS 1153	1				
MATH 1341 (FQ)	4	General Elective	4				
	17		17		8		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1115 (ND)	4	CHEM 2313	4	BIOL 2301 (ND)	4	Co-op	0
CHEM 2311	4	CHEM 2314	1	BIOL 2302 (AD)	1		
CHEM 2312	1	CHEM 2321 (AD, WI)	4	General Elective	4		
CHME 2310	4	CHEM 2322	1				
MATH 2341	4	CHME 2320	4				
		ENCP 2000	1				
		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 (AD)	4	BIOL 3612 (WI)	1		
		CHME 3316	0	General Elective	4		
		CHME 3322	4				
		ENGW 3302, 3307, or 3315 (WD)	4				
	0		16		9		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOL 4707	4	Vacation	0	Co-op	0
		CHME 4315 (AD, WI)	4				
		CHME 4316	0				
		CHME 4510	4				
		CHME 4701	4				

ENCP 3000	1			
0	17	0	0	0

#### Year 5

Fall	Hours	Spring	Hours
Co-op	0	CHME 4512	4
		CHME 4703 (EI, WI, CE)	4
		CHME 4705	0
		Advanced Biology Elective	4
		Advanced Chemistry Elective	4
	0		16

Total Hours: 145

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4

DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4

**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
DS 2500 or higher, except DS 4900	
CY 2000 or higher, except CY 4930	
IS 2000 or higher, except IS 4900	

**Supporting Courses for Data Science**

THTR 1170	The Eloquent Presenter	1
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**Statistics Foundations**

Complete one of the following:	4
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500
MATH 3081	Probability and Statistics

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Biochemistry Requirements**

Code	Title	Hours
<b>Biology Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
<b>Chemistry Foundations</b>		
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Mathematics Foundations</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
<b>Biochemistry Foundations</b>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	3-5
or CHEM 4620	Introduction to Protein Chemistry	
or CHEM 5620	Protein Chemistry	

**Intermediate or Advanced Science Elective**

Complete one course from the following	4-5
BIOL 2301 to BIOL 5999	
CHEM 2311 to CHEM 5999	
EEMB 2290 to EEMB 5999	
ENVR 2310 to ENVR 5999	
MATH 2280 to MATH 5999	
PHYS 2303 to PHYS 5999	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
BINF 6308	Bioinformatics Computational Methods 1	4
BINF 6309	Bioinformatics Computational Methods 2	4
Complete one of the following:	4	
BIOL 4701	Biology Capstone	
CHEM 4750	Senior Research	
DS 4900	Data Science Senior Project	

**Required General Electives**

Code	Title	Hours
Complete 12 credits of general electives.		12

**Major GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

136 total semester hours required

**Plan of Study**

**Sample Patterns: Five Years, Three Co-ops**

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation		
CS 1800 and CS 1802	5	BIOL 2299	4					
CS 2500 and CS 2501	5	MATH 1341	4					
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5					
ENGW 1111	4							
	20		18		0		0	
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
CS 3500	4	BIOL 2301 and BIOL 2302	5	CS 3200	4	Co-op		
DS 3000	4	DS 4200	4	BIOL 2309	4			

590 Biochemistry, Minor

MATH 1342	4	CHEM 2311 and CHEM 2312	5			
Intermediate/Advanced Science Elective	4	CS 1210	1			
		Statistics Foundation	4			
		16	19	8	0	

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4300	4	ENGW 3302	4	Co-op	
		CHEM 2313 and CHEM 2314	5	BIOL 3611 and BIOL 3612	5		
		Khoury Elective	4				
		General Elective	4				
		0	17	9	0		

Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Vacation		Co-op	
		THTR 1170	1				
		BINF 6308	4				
		CHEM 2331 or 4620	4				
		General Elective	4				
		0	17	0	0		

Year 5

Fall	Hours	Spring	Hours
Co-op		Capstone	4
		BINF 6309	4
		General Elective	4
		0	12

Total Hours: 136

Four Years, Two Co-ops

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4	MATH 1342	4		
CS 2500 and CS 2501	5	MATH 1341	4				
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5				
ENGW 1111	4						
		20	18	8	0		

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DS 3000	4	BIOL 2301 and BIOL 2302	5	CS 3200	4	Co-op	
Intermediate/Advanced Science Elective	4	DS 4200	4	BIOL 2309	4		
Statistics Foundation	4	DS 4300	4				
General Elective	4	CHEM 2311 and CHEM 2312	5				
		CS 1210	1				
		16	19	8	0		

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	ENGW 3302	4	Co-op	
		CHEM 2313 and CHEM 2314	5	BIOL 3611 and BIOL 3612	5		
		BINF 6308	4				
		Khoury Elective	4				
		THTR 1170	1				
		0	18	9	0		

Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		BINF 6309	4	General Elective	4
		CHEM 2331 or 4620	4		
		Capstone	4		
		General Elective	4		
		0	16	4	

Total Hours: 136

Biochemistry, Minor

The biochemistry minor allows students to engage in interdisciplinary study of biochemistry to complement their major plans of study.

Minor Requirements

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

The biochemistry minor is not available to majors in biology or cell and molecular biology due to curricular overlap.

Required Courses

Code	Title	Hours
<b>Core Courses</b>		
BIOL 4707	Cell and Molecular Biology	4

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
CHEM 5620	Protein Chemistry	3

### Biology Core Course

Code	Title	Hours
Complete one of the following course options:		4
BIOL 2327	Human Parasitology	
BIOL 3405	Neurobiology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 3409	Current Topics in Biology	
BIOL 3605	Developmental Neurobiology	
BIOL 3609	Developmental Biology	
BIOL 5306	Biological Clocks	
BIOL 5307 and BIOL 5308	Biological Electron Microscopy and Lab for BIOL 5307	
BIOL 5499	Plant Biotechnology	
BIOL 5541	Endocrinology	
BIOL 5543	Stem Cells and Regeneration	
BIOL 5549	Inventions in Microbial Biotechnology	
BIOL 5573	Medical Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5583	Immunology	
BIOL 5591	Advanced Genomics	
BIOL 5593	Cell and Molecular Biology of Aging	
BIOL 5597	Immunotherapies of Cancer and Infectious Disease	

### Chemistry Core Course

Code	Title	Hours
Complete one of the following course options:		4
CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	
CHEM 4621 and CHEM 4622	Introduction to Chemical Biology and Lab for CHEM 4621	
CHEM 4460	Enzymes: Chemistry and Chemical Biology	
CHEM 4628 and CHEM 4629	Introduction to Spectroscopy of Organic Compounds and Identification of Organic Compounds	
CHEM 5550	Introduction to Glycobiology and Glycoprotein Analysis	
CHEM 5611	Analytical Separations	
CHEM 5612	Principles of Mass Spectrometry	
CHEM 5613	Optical Methods of Analysis	
CHEM 5616 and CHEM 5617	Protein Mass Spectrometry and Protein Mass Spectrometry Laboratory	
CHEM 5625	Chemistry and Design of Protein Pharmaceuticals	
CHEM 5638	Molecular Modeling	
CHEM 5676	Bioorganic Chemistry	

### GPA Requirement

2.000 GPA required in the minor

### Biology

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

#### Jonathan Tilly, PhD

Chair and University Distinguished Professor

134 Mugar Life Sciences Building

617.373.2260

617.373.3724 (fax)

Advising website (<http://www.tinyurl.com/bioadv/>)

The Department of Biology offers two majors, the BS in biology and the BS in cell and molecular biology. Both majors lay the groundwork for strong scientific training with basic coursework in mathematics, chemistry, and physics, relevant to biology. In the biology major, students explore the organization and processes of life, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. The BS degree in cell and molecular biology offers a more focused program of study emphasizing processes operating at the cellular and molecular levels of biological systems. In both majors, students can select advanced electives to specialize in a subdiscipline of biology such as developmental biology, stem cell biology, microbiology, or physiology.

Our programs provide a wide range of relevant co-op opportunities in the renowned Boston-area biotechnology industry, hospitals, and research institutions, as well as across the country and at international sites.

There are a number of interdisciplinary opportunities involving biology. These include programs in behavioral neuroscience and in biochemistry, as well as combined majors between biology and computer science, data science, English, mathematics, or political science. Due to curricular overlap, combinations of any two of these programs or of any one of these programs with ecology and evolutionary biology, marine biology, or bioengineering are not offered.

Several accelerated bachelor/graduate degree programs are available: BS in Biology/MS in Bioinformatics, BS in Biology/MS in Biotechnology, BS in Computer Science and Biology/MS in Bioinformatics, BS in Cell and Molecular Biology/MS in Bioinformatics, BS in Cell and Molecular Biology/MS in Biotechnology, and BS in Biology/PhD in Biology.

Our degree programs are designed to prepare students to enter the job market directly or to go on to graduate, medical, veterinary, dental, law, or business school. Our graduates are qualified for a wide array of career paths in industrial and clinical research in any of the life sciences, in teaching at all levels, in state or federal government agencies, and in medicine and other healthcare-related professions. Premedical, pre-dental, and other preprofessional students are urged to consult with the prehealth advising program early in their careers at Northeastern.

### Programs

#### Bachelor of Science (BS)

- Biology (p. 592)
- Cell and Molecular Biology (p. 595)
- Biology and English (p. 599)
- Biology and Mathematics (p. 601)
- Biology and Political Science (p. 603)

- Computer Science and Biology (p. 322)
- Data Science and Biology (p. 386)

## Minors

- Biology (p. 610)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Biology, BS

The BS in biology curriculum lays the groundwork for strong scientific training with basic course work in mathematics, chemistry, and physics, relevant to biology. Students explore the organization and processes of life across broad areas of the field, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. Students can select advanced electives to specialize in a subdiscipline of biology such as developmental biology, stem cell biology, microbiology, or physiology.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Biology Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>Required Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Biology Capstone</b>		
BIOL 4701	Biology Capstone	4

## Biology Major Electives

Code	Title	Hours
<b>Organismal and Population Biology</b>		
Complete one of the following:		4-5
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	
<b>Intermediate and Advanced Biology</b>		
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	
<b>Supporting Courses</b>		
Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Physics</b>		

**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 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161

**Physics 2**

Complete one of the following lecture/lab pairs. PHYS 1147/  
PHYS 1148 is recommended: 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:

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						
BIOL 1000	1						
		19		17		9	
						0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500	4	BIOL 2309	4	BIOL 3611	4	Co-op	
ENVR 2501	1	PHYS 1145	4	BIOL 3612	1		
CHEM 2313	4	PHYS 1146	1	Elective	4		
CHEM 2314	1	Elective	4				
Elective	4	Elective	4				
Elective	4	EESC 2000	1				
		18		18		9	
						0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHYS 1147	4	Intermediate/ Advanced Biology Elective	4	Co-op	
ENGW 3307	4	PHYS 1148	1	(Intermediate, Advanced Biology Elective Lab)	1		
		Organismal/ Population Bio Elective	4	Elective	4		
		(Organismal/ Population Bio Elective Lab)	1				
		Intermediate/ Advanced Biology Elective	4				
		(Intermediate, Advanced Biology Elective Lab)	1				
		Elective	4				
		4		19		9	
						0	

**Year 4**

Fall	Hours	Spring	Hours
Co-op		Intermediate/ Advanced Biology Elective	4
		(Intermediate, Advanced Biology Elective Lab)	1
		Intermediate/ Advanced Science Elective	4
		(Intermediate, Advanced Science Elective Lab)	1
		BIOL 4701	4
		Elective	4
		0	
		18	

Total Hours: 140



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

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AP Credit for Biology	5	BIOL 2301	4	BIOL 2309	4	Vacation	
BIOL 2299	4	BIOL 2302	1	Elective	4		
CHEM 1161	4	CHEM 2311	4				
CHEM 1162	1	CHEM 2312	1				
MATH 1251	4	ENGW 1111	4				
Elective	4	Elective	4				
BIOL 1000	1						
	23		18		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500	4	Co-op		Co-op		PHYS 1147	4
ENVR 2501	1			Elective	4	PHYS 1148	1
CHEM 2313	4					Elective	4
CHEM 2314	1						
PHYS 1145	4						
PHYS 1146	1						
EESC 2000	1						
	16		0		4		9

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Intermediate/Advanced Biology Elective	4	Co-op		Co-op		Intermediate/Advanced Science Elective	4
(Intermediate, Advanced Biology Elective Lab)	1					(Intermediate, Advanced Science Elective Lab)	1
BIOL 3611	4					Elective	4
BIOL 3612	1						
ENGW 3307	4						
Elective	4						
	18		0		0		9

**Year 4**

Fall	Hours	Spring	Hours
Intermediate/Advanced Biology Elective	4	Intermediate/Advanced Biology Elective	4
(Intermediate, Advanced Biology Elective Lab)	1	(Intermediate, Advanced Biology Elective Lab)	1
Organismal/Population Bio Elective	4	BIOL 4701	4
(Organismal/Population Bio Elective Lab)	1	Elective	4
Elective	4	Elective	4

Elective	4
	18
	17

Total Hours: 140

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 1107	4	BIOL 2299	4	BIOL 2301	4	Vacation	0
BIOL 1108	1	CHEM 2311	4	BIOL 2302	1		
CHEM 1161	4	CHEM 2312	1	Elective	4		
CHEM 1162	1	ENGW 1111	4				
MATH 1251	4	Elective	4				
Elective	4						
BIOL 1000	1						
	19		17		9		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500	4	BIOL 2309	4	Intermediate/Advanced Biology Elective	4	Co-op	0
ENVR 2501	1	PHYS 1145	4	(Intermediate, Advanced Biology Elective Lab)	1		
CHEM 2313	4	PHYS 1146	1	Elective	4		
CHEM 2314	1	Elective	4				
Elective	4	Elective	4				
Elective	4	EESC 2000	1				
	18		18		9		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	BIOL 3611	4	Vacation		Co-op	0
		BIOL 3612	1				
		PHYS 1147	4				
		PHYS 1148	1				
		ENGW 3307	4				
		Elective	4				
	0		18		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Intermediate/Advanced Biology Elective	4	Vacation		Co-op	0
		(Intermediate, Advanced Biology Elective Lab)	1				
		Organismal/Population Bio Elective					
		(Organismal/Population Bio Elective Lab)	1				

	Elective	4			
	Elective	4			
	0	14	0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
Co-op	0	Intermediate/ Advanced Biology Elective	4		
		(Intermediate, Advanced Biology Elective Lab)	1		
		BIOL 4701	4		
		Intermediate/ Advanced Science Elective	4		
		(Intermediate/ Advanced Science Elective Lab)	1		
		Elective	4		
	0	18			

Total Hours: 140

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

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
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

<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
ENVR 2500	4	Co-op		Co-op		PHYS 1147	4
ENVR 2501	1					PHYS 1148	1
CHEM 2313	4					Elective	4
CHEM 2314	1						
PHYS 1145	4						
PHYS 1146	1						
EESC 2000	1						
	16	0	0				9

<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
BIOL 3611	4	Co-op		Co-op		Vacation	
BIOL 3612	1						
ENGW 3307	4						
Elective	4						

	Elective	4					
	17	0	0	0	0		
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Intermediate/ Advanced Biology Elective	4	Co-op		Co-op		Vacation	
(Intermediate, Advanced Biology Elective Lab)	1						
Organismal/ Population Bio Elective	4						
(Organismal/ Population Bio Elective Lab)	1						
Elective	4						
Elective	4						
	18	0	0				0

<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Intermediate/ Advanced Biology Elective	4	Intermediate/ Advanced Biology Elective	4				
(Intermediate, Advanced Biology Elective Lab)	1	(Intermediate, Advanced Biology Elective Lab)	1				
Intermediate/ Advanced Science Elective	4	BIOL 4701	4				
(Intermediate, Advanced Science Elective Lab)	1	Elective	4				
Elective	4						
Elective	4						
	18	13					

Total Hours: 140

## Cell and Molecular Biology, BS

The BS in cell and molecular biology curriculum lays the groundwork for strong scientific training with basic course work in mathematics, chemistry, and physics, relevant to biology. Students pursue a focused program of study emphasizing processes operating at the cellular and molecular levels of biological systems, including specialty courses in molecular cell biology and advanced genomics. Students choose from a range of advanced electives that delve deeply into molecular aspects of biology.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Cell and Molecular Biology Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
<b>Introduction to Experiential Learning</b>		
EESC 2000	Professional Development for Co-op	1
<b>Required Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<i>Molecular Biology</i>		
BIOL 4707	Cell and Molecular Biology	4
BIOL 5591	Advanced Genomics	4
<b>Intermediate/Advanced Cell and Molecular Biology Electives</b>		
Complete two of the following:		
BIOL 3411	Current Topics in Cell and Molecular Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
BIOL 2329	Bioethics	
BIOL 3601	Neural Systems and Behavior	
BIOL 3603	Mammalian Systems Physiology	
BIOL 3605	Developmental Neurobiology	
BIOL 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	Inventions in Microbial Biotechnology	
BIOL 5569	Advanced Microbiology	
BIOL 5573	Medical Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5583	Immunology	
BIOL 5585	Evolution	

BIOL 5587	Comparative Neurobiology
BIOL 5593	Cell and Molecular Biology of Aging
BIOL 5597	Immunotherapies of Cancer and Infectious Disease

### 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	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Physics</b>		
<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
<i>Physics 2</i>		
Complete one of the following lecture/lab pairs. PHYS 1147/PHYS 1148 is recommended:		5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

**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**

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	Vacation			
BIOL 1108	1	CHEM 2311	4	BIOL 2302	1				
CHEM 1161	4	CHEM 2312	1	Elective	4				
CHEM 1162	1	ENGW 1111	4						
MATH 1251	4	Elective	4						
Elective	4								
BIOL 1000	1								
		19			17			9	0

  

Year 2									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
ENVR 2500	4	BIOL 2309	4	BIOL 3611	4	Co-op			
ENVR 2501	1	PHYS 1145	4	BIOL 3612	1				
CHEM 2313	4	PHYS 1146	1	Elective	4				
CHEM 2314	1	Elective	4						
Intermediate/ advanced CMB elective	4	Elective	4						
(Intermediate, advanced CMB elective lab)	1	EESC 2000	1						
Elective	4								
		19			18			9	0

  

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Intermediate/ advanced CMB elective	4	BIOL 4707	4	Co-op	

Elective	4	(Intermediate, advanced CMB elective lab)	1	Elective	4		
		PHYS 1147	4				
		PHYS 1148	1				
		ENGW 3307	4				
		Elective	4				
		4	18			8	0

  

Year 4			
Fall	Hours	Spring	Hours
Co-op		BIOL 5591	4
		BIOL 4701	4
		Intermediate/ advanced science elective	4
		(Intermediate, advanced science elective lab)	1
		Elective	4
		0	17

Total Hours: 138

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

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/ advanced science elective	4

PHYS 1147	4	(Intermediate, advanced science elective lab)	1
PHYS 1148	1	Elective	4
ENGW 3307	4		
Elective	4		
<hr/>			
	17	0	0
			9

**Year 4**

Fall	Hours	Spring	Hours
BIOL 5591	4	BIOL 4701	4
Intermediate/advanced CMB elective	4	Intermediate/advanced CMB elective	4
(Intermediate/advanced science elective lab)	1	(Intermediate/advanced CMB elective lab)	1
Elective	4	Elective	4
Elective	4	Elective	4
<hr/>			
	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						
BIOL 1000	1						
<hr/>							
	19		17		9		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500	4	BIOL 2309	4	BIOL 3611	4	Co-op	
ENVR 2501	1	PHYS 1145	4	BIOL 3612	1		
CHEM 2313	4	PHYS 1146	1				
CHEM 2314	1	Elective	4				
Elective	4	Elective	4				
Elective	4	EESC 2000	1				
<hr/>							
	18		18		5		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BIOL 4707	4	Vacation		Co-op	
		PHYS 1147	4				
		PHYS 1148	1				
		ENGW 3307	4				
		Elective	4				
<hr/>							
	0		17		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Intermediate/advanced CMB elective	4	Vacation		Co-op	
		(Intermediate, advanced CMB elective lab)	1				
		Intermediate/advanced science elective	4				
		Intermediate/advanced science elective lab)	1				
		Elective	4				
		Elective	4				
<hr/>							
	0		18		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		BIOL 5591	4
		BIOL 4701	4
		Intermediate/advanced CMB elective	4
		(Intermediate, advanced CMB elective lab)	1
		Elective	4
<hr/>			
	0		17

Total Hours: 138

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

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AP credit for biology	5	BIOL 2301	4	BIOL 2309	4	Vacation	
BIOL 2299	4	BIOL 2302	1	Elective	4		
CHEM 1161	4	CHEM 2311	4				
CHEM 1162	1	CHEM 2312	1				
MATH 1251	4	ENGW 1111	4				
Elective	4	Elective	4				
BIOL 1000	1						
<hr/>							
	23		18		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500	4	Co-op		Co-op		BIOL 3611	4
ENVR 2501	1					BIOL 3612	1
CHEM 2313	4					Elective	4
CHEM 2314	1						
PHYS 1145	4						
PHYS 1146	1						

EESC 2000	1						
	16		0		0		9

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 4707	4	Co-op		Co-op		Vacation	
PHYS 1147	4						
PHYS 1148	1						
ENGW 3307	4						
Elective	4						
	17		0		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 5591	4	Co-op		Co-op		Vacation	
Intermediate/ advanced CMB elective	4						
(Intermediate/ advanced CMB elective lab)	1						
Elective	4						
Elective	4						
	17		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
BIOL 4701	4	Intermediate/ advanced science elective	4
Intermediate/ advanced CMB elective	4	(Intermediate, advanced science elective lab)	1
(Intermediate/ advanced CMB elective lab)	1	Elective	4
Elective	4	Elective	4
Elective	4		
	17		13

Total Hours: 138

**Biology and English, BS**

In the 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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Biology Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or ENGL 1000	Biology at Northeastern English at Northeastern	1
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>Required Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

**Biology Elective**

Code	Title	Hours
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	



BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

## Supporting Courses for Biology

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Physics</b>		
<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/ PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
<i>Physics 2</i>		
Complete one of the following lecture/lab pairs. PHYS 1147/ PHYS 1148 is recommended:		5
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		

## Introduction to College

ENGL 1000	English at Northeastern	1
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## Foundational Courses

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to 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 Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	

## Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following: 4

ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

## Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children’s Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Topics in Writing	

ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer’s Marketplace

**English Electives**

Complete two additional ENGL electives. 8

**Integrative Courses**

Code	Title	Hours
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**Integrative English Course**

Complete one of the following: 4

ENGL 2770	Writing to Heal
ENGL 3340	Technologies of Text

**Integrative General Biological Sciences Course**

Complete one of the following: 4

PSYC 3464	Psychology of Language
PSYC 4520	Language and the Brain
SOCL 3485	Environment, Technology, and Society

**Capstone Requirement**

Complete one of the following capstone options:

Code	Title	Hours
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**Biology Capstone**

BIOL 4701	Biology Capstone	4
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**English Capstone**

ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

**Biology and English Combined Major GPA Requirement**

Minimum 2.000 GPA required in all BIOL courses  
 Minimum 2.000 GPA required in all ENGL courses

**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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or MATH 1000	Biology at Northeastern Mathematics at Northeastern	1
<b>Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Biochemistry</b>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology Elective</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

## Mathematics Requirements

Code	Title	Hours
<b>Calculus 1</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4
<b>Calculus 2 and Calculus 3</b>		
MATH 1342 or MATH 1252	Calculus 2 for Science and Engineering Calculus and Differential Equations for Biology 2	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Physics</b>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
<b>Required Mathematics Courses</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
<b>Mathematics Electives</b>		
Complete three of the following:		12
MATH 2331	Linear Algebra	
MATH 3001 to MATH 4899		

## Additional Requirements

Code	Title	Hours
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Capstone</b>		
Complete one of the following:		4
BIOL 4701	Biology Capstone	
MATH 4020	Research Capstone	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	
<b>Biology/Mathematics Integrative Courses</b>		
Complete two of the following:		8-10
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
BIOL 3405	Neurobiology	
BIOL 5569	Advanced Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5591	Advanced Genomics	
MATH 4581	Statistics and Stochastic Processes	
MATH 7343	Applied Statistics	
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	
<b>Writing Requirement</b>		
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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
or POLS 1000	Political Science at Northeastern	
<b>Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
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### Intermediate/Advanced Biology

Complete one of the following: 4-5

BIOL 2327 to BIOL 3999

BIOL 4705 to BIOL 5999

### Organismal and Population Biology Elective

Complete one of the following: 4-5

BIOL 2327 Human Parasitology

BIOL 3401 Comparative Vertebrate Anatomy

BIOL 3403 Animal Behavior

BIOL 3413 Current Topics in Organismal and Population Biology

BIOL 3421 and BIOL 3422 Microbiology and Lab for BIOL 3421

EEMB 2302 and EEMB 2303 Ecology and Lab for EEMB 2302

EEMB 2400 Introduction to Evolution

EEMB 2616 and EEMB 2617 Invertebrate Zoology and Lab for EEMB 2616

EEMB 2700 and EEMB 2701 Marine Biology and Lab for EEMB 2700

EEMB 3460 Conservation Biology

### Mathematics

MATH 1251	Calculus and Differential Equations for Biology 1	4
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### Chemistry

#### General Chemistry

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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#### Organic Chemistry

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
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CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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### Physics

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
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### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Statistics</b>		
Complete one of the following:		4-5
POLS 2400	Quantitative Techniques	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2328	Modern Political Thought	

POLS 2325	Ancient Philosophy and Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Elective**

Complete five POLS courses 2000 and above. 20

**Political Science Concentration (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 604)
- Campaigns and Elections (p. 604)
- Comparative Politics (p. 604)
- Identity, Culture, and Politics (p. 604)
- International Relations and Diplomacy (p. 604)
- Law and Legal Studies (p. 605)
- Public Policy (p. 605)
- Security Studies (p. 605)

**Integrative Requirement and Capstone**

*Note:* Science, Technology, and Public Policy (POLS 2390) and Environmental Politics and Policy (POLS 2395) cannot be used both as an integrative course and as an elective above.

Code	Title	Hours
<b>Integrative Requirement</b>		
POLS 2390 or POLS 2395	Science, Technology, and Public Policy Environmental Politics and Policy	4
<b>Capstone</b>		
BIOL 4701 or POLS 4701	Biology Capstone Political Science Senior Capstone	4

**Program Requirement**

136 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8

POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12



POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Computer Science and Biology, BS**

The computer science and biology combined major reflects how research in biology, especially genetics, has become a computational science. The program provides a strong foundation in biology, chemistry, and mathematics, as well as software development and algorithms.

**Program Requirements**

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

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar <sup>1</sup>	
CS 1210	Professional Development for Khoury Co-op <sup>2</sup>	

**Computer Science Fundamental Courses**

A grade of C– or higher is required in all computer science fundamental courses except CS 1802:

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation (integrative course)	4
CS 4500 and CS 4501	Software Development and	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With advisor approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
CY 2000 or higher, except CY 4930
DS 2000 or higher, except DS 4900
IS 2000 or higher, except IS 4900

<sup>1</sup> Students entering through the biology department may take Biology at Northeastern (BIOL 1000).

<sup>2</sup> Students entering through the biology department may take Professional Development for Co-op (EESC 2000).



**Biology Courses**

Code	Title	Hours
<b>Foundations of Biology</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<b>Inquiries</b>		
BIOL 2299	Inquiries in Biological Sciences	4
<b>Molecular Biology</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Techniques in Biology</b>		
BIOL 2309	Biology Project Lab	4
<b>Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Biology Capstone</b>		
BIOL 4701	Biology Capstone	4
<b>Intermediate and Advanced Biology Electives</b>		
Complete two biology courses (with corequisite labs if offered). Choose one of these two courses from the following list:		9-10
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	
Choose the second elective from the following list:		4-5
BIOL 2311 to 4999, EEMB 2290 to 5515, EEMB 5520 to 5534, EEMB 5548 to 5569, EEMB 2400		
<b>Biology Integrative Course</b>		
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 4548	Sociobiology

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
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
<b>Probability and Statistics</b>		
Complete one of the following:		4-5
MATH 3081	Probability and Statistics	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**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
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives		16

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World

- Conducting Formal and Quantitative Reasoning
- Exploring Creative Expression and Innovation
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Program Requirement

141 total semester hours required

### Plan of Study

#### Sample Patterns:

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	BIOL 2301	4	Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4	BIOL 2302	1		
CS 2500 and CS 2501	5	ENGW 1111	4	Elective	4		
BIOL 1107 and BIOL 1108	5	Elective	4				
CHEM 1161	4						
CHEM 1162	1						
CHEM 1163	0						
	21		17		9		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	Elective	4	Co-op	
CHEM 2311 and CHEM 2312	5	CHEM 2313 and CHEM 2314	5	BIOL 2309	4		
CS 3200	4	CS 3000	4				
MATH 1251	4	BIOL 3611	4				
		BIOL 3612	1				
		MATH 1252	4				
	17		19		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	ENGW 3302	4	Co-op	

Computing and social issues	4	ENVR 2500 and ENVR 2501 (or MATH 3081)	5				
BIOL elective	5						
BIOL integrative elective	4						
THTR 1170	1						
	0		18		9		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500 and CS 4501	4	BIOL Elective	4	Co-op	
		BIOL 4701	4	Elective	4		
		BIOL Intermediate/Advanced elective	4				
		Khoury Elective	4				
	0		16		8		0

Total Hours: 142

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

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	BIOL 2299	4				
BIOL 1107 and BIOL 1108	5	ENGW 1111	4				
CS 1200	1	MATH 1251	4				
CHEM 1161	4						
CHEM 1162	1						
CHEM 1163	0						
	21		17		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 3000	4	Vacation	0	Co-op	0
CS 3200	4	BIOL 2301	4				
CHEM 2311 and CHEM 2312	5	BIOL 2302	1				
MATH 1252	4	CHEM 2313 and CHEM 2314	5				
		CS 1210	1				
		Elective	4				
	17		19		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		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	17	9	0		
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	BIOL elective	5	Elective	4	Co-op
		Khoury Elective	4	Elective	4	
		ENVR 2500 and ENVR 2501 (or MATH 3081)	5			
		Computing and social issues	4			
	0	18	8	0		
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op	0	CS 4500 and CS 4501	4			
		BIOL integrative elective	4			
		BIOL 4701	4			
		BIOL Intermediate/Advanced elective	4			
	0	16				

Total Hours: 142

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

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation
CS 2500 and CS 2501	5	BIOL 2299	4			
BIOL 1107 and BIOL 1108	5	ENGW 1111	4			
CS 1200	1	MATH 1251	4			
CHEM 1161	4					
CHEM 1162	1					
CHEM 1163	0					
	21	17	0	0		
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CHEM 2311 and CHEM 2312	5	Co-op	0	Co-op	0	Vacation
CS 3500	4					
CS 1210	1					
MATH 1252	4					
BIOL 2301	4					

BIOL 2302	1					
	19	0	0	0		0
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 3000	4	Co-op	0	Co-op	0	Elective
CHEM 2313 and CHEM 2314	5				ENGW 3302	4
BIOL 2309	4					
BIOL 3611	4					
BIOL 3612	1					
	18	0	0	0		8

<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 3800	4	Co-op	0	Co-op	0	Elective
BIOL elective	4				Elective	4
Elective	4					
THTR 1170	1					
CS 3200	4					
	17	0	0	0		8

<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
BIOL elective	5	CS 4500 and CS 4501	4			
Khoury Elective	4	BIOL 4701	4			
ENVR 2500 and ENVR 2501 (or MATH 3081)	5	BIOL integrative elective	4			
Computing and social issues	4	BIOL Intermediate/Advanced elective	4			
	18	16				

Total Hours: 142

## Data Science and Biology, BS

The data science and biology major provides a strong foundation in biology, chemistry, and mathematics, as well as software development and algorithms. Students study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. Students also explore the organization and processes of life across broad areas of the field, from molecules and cells through organs and organ systems to populations, ecosystems, and evolution.

### Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Supporting Course for Data Science</b>		
THTR 1170	The Eloquent Presenter	1
<b>Statistics Foundations</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Computer Science Writing Requirements</b>		
Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4

or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines
or ENGW 3307	Advanced Writing in the Sciences

## Biology Requirements

Code	Title	Hours
<b>Biology Foundations</b>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Chemistry Foundations</b>		
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
<b>Intermediate and Advanced Biology Elective</b>		
Complete one of the following:		4
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
EEMB 2290 to EEMB 5515		
EEMB 5520 to EEMB5534		
EEMB 5548 to EEMB 5569		
ENVR 5242	Ancient Marine Life Research:	
BIOL 4991	Research	
BIOL 4970	Junior/Senior Honors Project 1	
BIOL 4971	Junior/Senior Honors Project 2	
BIOL 4994	Internship	
<b>Organismal and Population Biology Elective</b>		
Complete one course and its corresponding lab, if indicated:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2618 and EEMB 2619	Vertebrate Zoology and Lab for EEMB 2618	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	
<b>Physics Requirement</b>		

Complete one of the following lecture/lab pairs. PHYS 1145/  
PHYS 1146 is recommended: 5

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

PHYS 1161 Physics 1  
and PHYS 1162 and Lab for PHYS 1161

**Mathematics Foundations**

MATH 1251 Calculus and Differential Equations for  
Biology 1 4

**Integrative Requirements**

**Code Title Hours**

**Integrative Course**

Complete one of the following: 4

BIOL 5569 Advanced Microbiology

BINF 6308 Bioinformatics Computational Methods  
1

BIOL 4707 Cell and Molecular Biology

BIOL 5581 Biological Imaging

BIOL 5587 Comparative Neurobiology

BIOL 5591 Advanced Genomics

**Capstone**

Complete one of the following: 4

BIOL 4701 Biology Capstone

DS 4900 Data Science Senior Project

**Required General Electives**

**Code Title Hours**

Complete 20 credits of general electives. 20

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

141 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Five Years, Three Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	BIOL 2299	4				
CS 2500 and CS 2501	5	MATH 1251	4				
BIOL 1107 and BIOL 1108	5	CHEM 1161 and CHEM 1162	5				
ENGW 1111	4						
	20		18		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DS 3000	4	CS 1210	1	Vacation		Co-op	

CS 3500	4	DS 4200	4				
PHYS 1145 and PHYS 1146	5	BIOL 2301 and BIOL 2302	5				
CHEM 2311 and CHEM 2312	5	ENVR 2500 and ENVR 2501	5				
		CHEM 2313 and CHEM 2314	5				
	18		20		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3200	4	BIOL 3611 and BIOL 3612	5	Co-op	
		DS 4300	4	General elective	4		
		BIOL 2309	4				
		BIOL intermediate/ advanced elective	4				
	0		16		9		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	ENGW 3302	4	Co-op	
		THTR 1170	1	General elective	4		
		Khoury Elective	4				
		Integrative course	4				
		General elective	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		Capstone	4
		Organismal and population biology elective	4
		General elective	4
		General elective	4
	0		16

Total Hours: 142

**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	Hours
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/>)

**Penny Beuning, PhD**  
Professor and 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. 611)
- Environmental Science and Chemistry (p. 613)

### Minor

- Chemistry (p. 615)
- Environmental Chemistry (p. 458)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Chemistry, BS

The Bachelor of Science in Chemistry is designed to give students both breadth and depth in chemistry fundamentals. During their course of study, students have an opportunity to develop qualitative and quantitative problem-solving skills as well as effective communication skills. The overall objective of the program is to provide scientific background and laboratory experience for students as they prepare for chemically related careers or advanced study in fields that include both the traditional chemical specialties and other endeavors that draw upon an understanding of the chemical basis of the world around us such as biochemistry, materials science, forensic science, medicine, education, or law.

## Program Requirements

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

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).



## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Chemistry Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
CHEM 1000	Chemistry/Chemical Biology at Northeastern	1
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1
<b>General Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2161 and CHEM 2162 and CHEM 2163	Concepts in Chemistry and Lab for CHEM 2161 and Recitation for CHEM 2161	5
<b>Organic Chemistry</b>		
CHEM 2315 and CHEM 2316	Organic Chemistry 1 for Chemistry Majors and Lab for CHEM 2315	6
CHEM 2317 and CHEM 2318	Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317	6
<b>Analytical Chemistry</b>		
CHEM 2321 and CHEM 2332	Analytical Chemistry and Lab for CHEM 2331	5
<b>Physical Chemistry</b>		
CHEM 3401 and CHEM 3402	Chemical Thermodynamics and Kinetics and Lab for CHEM 3401	5
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	5
<b>Biochemistry</b>		
CHEM 4621 and CHEM 4622	Introduction to Chemical Biology and Lab for CHEM 4621	5
<b>Advanced-Level Chemistry</b>		
Complete one of the following courses:		5
CHEM 3501 and CHEM 3502	Inorganic Chemistry and Lab for CHEM 3501	
CHEM 3505 and CHEM 3506	Introduction to Bioinorganic Chemistry and Lab for CHEM 3505	
Complete two of the following courses:		9-11
CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	
CHEM 4456 and CHEM 4457	Organic Chemistry 3: Organic Chemistry of Drug Design and Development and Lab for CHEM 4456	
CHEM 4620	Introduction to Protein Chemistry	
CHEM 4628 and CHEM 4629	Introduction to Spectroscopy of Organic Compounds and Identification of Organic Compounds	
<b>Senior Research/Capstone</b>		
CHEM 4750	Senior Research	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
<b>Physics</b>		
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5

## Chemistry Major Credit Requirement

Complete 79 semester hours in the major.

## Program Requirement

135 total semester hours required

## Plan of Study

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

Please note that these are sample plans of study. While the requirements are the same for all students, individual schedules may vary.

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1000	1	CHEM 2315	4	Open	0	Open	0
CHEM 1161	4	CHEM 2316	2				
CHEM 1162	1	MATH 1342	4				
CHEM 1163	0	PHYS 1151	3				
MATH 1341	4	PHYS 1152	1				
ENGW 1111	4	PHYS 1153	1				
Elective	4	Elective	4				
		18		19		0	

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2161	4	EESC 2000	1	Open	0	Co-op	0
CHEM 2162	1	CHEM 2321	4				
CHEM 2163	0	CHEM 2322	1				
CHEM 2317	4	Elective	4				
CHEM 2318	2	Elective	4				
PHYS 1155	3	Elective	4				
PHYS 1156	1						
PHYS 1157	1						
Elective	4						
		20		18		0	

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHEM 3401	4			Co-op	0
		CHEM 3402	1	Elective	4		
		CHEM 3505	4	Elective	4		
		CHEM 3506	1				
		ENGW 3307	4				

		Elective	4				
		0	18			8	0
<b>Year 4</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHEM 3403	4	Open	0	Co-op	0
		CHEM 3404	1				
		Chemistry Elective	4				
		Elective	4				
		Elective	4				
		0	17			0	0

<b>Year 5</b>							
Fall	Hours	Spring	Hours				
Co-op	0	CHEM 4621	4				
		CHEM 4622	1				
		CHEM 4750	4				
		Chemistry Elective	5				
		Elective	4				
		0	18				

Total Hours: 136

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

<b>Year 1</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1000	1	CHEM 2315	4	PHYS 1155	3	Open	
CHEM 1161	4	CHEM 2316	2	PHYS 1156	1		
CHEM 1162	1	MATH 1342	4	PHYS 1157	1		
CHEM 1163	0	PHYS 1151	3	Elective	4		
MATH 1341	4	PHYS 1152	1				
ENGW 1111	4	PHYS 1153	1				
Elective	4	Elective	4				
		18	19			9	0

<b>Year 2</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2161	4	EESC 2000	1	Elective	4	Co-op	
CHEM 2162	1	CHEM 2321	4	Elective	4		
CHEM 2163	0	CHEM 2322	1				
CHEM 2317	4	CHEM 3501	4				
CHEM 2318	2	CHEM 3502	1				
Elective	4	Elective	4				
Elective	4	Elective	4				
		19	19			8	0

<b>Year 3</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CHEM 3401	4	Elective	4	Co-op	
		CHEM 3402	1	Elective	4		
		Chemistry Elective	5				
		Chemistry Elective	4				
		ENGW 3307	4				
		0	18			8	0

<b>Year 4</b>			
Fall	Hours	Spring	Hours
Co-op		CHEM 3403	4
		CHEM 3404	1
		CHEM 4621	4
		CHEM 4622	1
		CHEM 4750	4
		Elective	4
		0	18

Total Hours: 136

## Environmental Science and Chemistry, BS

The Departments of Marine and Environmental Sciences and Chemistry provide education in basic environmental science and chemistry-related disciplines. The overall objective of this combined major is to provide the fundamental scientific background and practical training for students as they prepare for environmental and chemically related careers or advanced study in fields including the traditional specialties such as toxicology, pollution, 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

### Environmental Science Major Requirements

Code	Title	Hours
<b>Earth Foundations</b>		
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
<b>Geomorphology</b>		

ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	5
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**Environmental Geology Intermediate/Advanced Electives**

Complete two intermediate or advanced electives from ENVR 2300 to ENVR 5999.	8-10
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**Supporting Courses for Environmental Science**

Code	Title	Hours
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**Mathematics**

MATH 1241	Calculus 1	4
MATH 1242	Calculus 2	4

**Science Requirement**

Complete one of the following options:	10
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*Biology Option*

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	

*Physics Option*

PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	

**Chemistry Major Requirements**

Code	Title	Hours
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**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

**Intermediate-Level 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
CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	5
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	5
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5

**Advanced-Level Chemistry**

CHEM 3521 and CHEM 3522	Instrumental Methods of Analysis and Instrumental Methods of Analysis Lab	5
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**Environmental Science/Chemistry Integrative Requirement**

Code	Title	Hours
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Choose two courses from the following:

ENVR 3410	Environmental Geochemistry	
ENVR 5190	Soil Science	

**Environmental Science/Chemistry Major Credit Requirement**

Complete 94 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
CHEM 1211 and CHEM 1212 and CHEM 1213	5	CHEM 1214 and CHEM 1215 and CHEM 1216	5	Vacation	0	Vacation	0
ENGW 1111	4	ENVR 1202 and ENVR 1203	5				
ENVR 1200 and ENVR 1201	5	MATH 1242	4				
MATH 1241	4	Elective	4				
	18		18		0		0

**Year 2**

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 and ENVR 2311	5	EESC 2000	1				
Physics 1 or Biology 1	5	GEOL intermediate/ advanced undergraduate elective	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 and CHEM 2332	5	Elective	4	Co-op	0
		ENVR 2340 and 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 and CHEM 3522	5	Co-op	0
		CHEM 3432	1	Elective	4		
		Elective	4				

GEOL intermediate/ advanced undergraduat elective	4			
Integrative course	4			
	0	17	9	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ENGW 3303, 3307, or 3315	4
		CHEM 3403	4
		CHEM 3404	1
		Elective	4
		Elective	4
	0	17	

Total Hours: 136

**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**

Students must take either General Chemistry 1 (CHEM 1211) and General Chemistry 2 (CHEM 1214) or General Chemistry for Science Majors (CHEM 1161).

*Note:* Engineering students may take General Chemistry for Engineers (CHEM 1151) in place of General Chemistry 1 (CHEM 1211) and General Chemistry 2 (CHEM 1214) or General Chemistry for Science Majors (CHEM 1161).

Excluded: Undergraduate Research (CHEM 4901) Junior/Senior Honors Project 1 (CHEM 4970), Junior/Senior Honors Project 2 (CHEM 4971) or other research courses from approved electives.

Code	Title	Hours
<b>General Chemistry</b>		
Choose one option.		4-10
<i>General Chemistry</i>		
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214	
<i>Chemistry for Science Majors</i>		
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	
<i>Chemistry for Engineers</i>		
CHEM 1151	General Chemistry for Engineers	

or other Chemistry and Chemical Biology approved course

**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

**Analytical Chemistry**

CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321 (Analytical Chemistry)	5
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**Physical Chemistry**

CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5
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*Engineering students may substitute the following course:*

CHME 2320	Chemical Engineering Thermodynamics 1
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**Advanced Lab**

Complete one of the following:		5
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	
CHEM 4456 and CHEM 4457	Organic Chemistry 3: Organic Chemistry of Drug Design and Development and Lab for CHEM 4456	

**GPA Requirement**

2.000 GPA required in the minor

**Environmental Chemistry, Minor**

The minor in environmental chemistry offers an opportunity for students of any background interested in environmental sciences to better understand the chemistry of the environment. Students completing the minor in environmental chemistry have an opportunity to learn about the chemical processes of natural systems and environmental pollutants, while earning a credential that highlights their interest and expertise. This can be a useful course of study whether their primary degree and career will be in one of the traditional chemical, environmental, or engineering programs, or another allied field. No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

**Minor Requirements**

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

*Note:* No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

**Required Courses**

Code	Title	Hours
<b>Environmental Chemistry Core</b>		
Complete one of the following:		4
CIVE 2335	Environmental Engineering Chemistry	
ENVR 3410	Environmental Geochemistry	
<b>Chemistry Core</b>		
Complete one of the following:		5
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	

CHEM 2331 and CHEM 2322	Bioanalytical Chemistry and Lab for CHEM 2321	
<b>Research Experience</b>		
Complete one of the following:		4
CHEM 4750	Senior Research	
CHEM 4901	Undergraduate Research	
CHEM 4992	Directed Study	
CIVE 4991	Research	
CIVE 4992	Directed Study	
ENVR 4900 or ENVR 4997	Earth and Environmental Science Capstone Senior Thesis	
ENVR 4992	Directed Study	

## Electives

Code	Title	Hours
Complete two of the following:		
CIVE 2335	Environmental Engineering Chemistry (If not used to satisfy Environmental Chemistry Core)	8-9
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
ENVR 3125	Global Oceanic Change	
ENVR 3410	Environmental Geochemistry (If not used to satisfy Environmental Chemistry Core)	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4504	Environmental Pollution	
ENVR 4505	Wetlands	
ENVR 5190	Soil Science	

## GPA Requirement

Minimum 2.000 GPA required in all major courses

## Credit Requirement

Minimum of 21 hours required

## Linguistics

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

### Heather Littlefield, PhD

Teaching Professor and Program Director

545 Nightingale Hall  
617.373.4553  
linguistics@northeastern.edu

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, philosophy, 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, data 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 language processing and language acquisition labs in the Department of Psychology. Linguistics majors can also participate in international co-ops—for example, working with researchers at the University of Kaiserslautern in Germany.

Students with backgrounds in linguistics have pursued advanced degrees in fields including law, cognitive science, education, English, interpreting, business, speech 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. 617)
- American Sign Language and Linguistics (p. 618)
- Computer Science and Linguistics (p. 356)
- Data Science and Linguistics (p. 404)
- Linguistics and Cultural Anthropology (p. 624)
- Linguistics and Psychology (p. 626)
- Linguistics and Speech-Language Pathology & Audiology (p. 516)

## Bachelor of Arts (BA)

- Linguistics and Communication Studies (p. 149)
- Linguistics and English (p. 632)

## Minor

- Linguistics (p. 635)

## 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Linguistics Major Language Requirement

Code	Title	Hours
Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.		

## Linguistics Major Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
PSYC 3464	Psychology of Language	4
<b>Linguistic Structure</b>		
LING 3420	Phonetics	4
LING 3422	Phonology	4
LING 3424	Morphology	4
LING 3450	Syntax	4
LING 3452	Semantics	4
<b>Laboratory</b>		

## Prerequisites

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4

## Laboratory

Complete one of the following: 4

PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	

Note: With prior approval, any of the following courses may be used to fulfill the laboratory requirement. Consult your adviser to discuss this option:

LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
PSYC 4991	Directed Study Research	

## Linguistics Seminar

LING 4654	Seminar in Linguistics	4
or PSYC 4658	Seminar in Psycholinguistics	

## Linguistics Electives

Complete four of the following (not counted above): 16

DEAF 2700	ASL Linguistics	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
or PSYC 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	

## Experiential Learning

Complete one of the following options. Courses used to satisfy this requirement will also typically satisfy a requirement above. 0-4

Study abroad (not a Dialogue of Civilizations)		
International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	



## Linguistics Major Credit Requirement

Complete 76 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

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

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation	0	Vacation	0
PSYC 1101	4	PSYC 3464	4				
ENGW 1111	4	NUpath or Elective	4				
MATH 1215	4	Foreign language course	4				
LING 1000	1						
		17		16		0	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	Linguistic structure course	4	Vacation	0	Co-op	0
PSYC 2320	4	Linguistic structure course	4				
Linguistic structure course	4	Linguistics elective	4				
Foreign language course	4	NUpath or Elective	4				
		EESC 2000	1				
		16		17		0	

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistic structure course	4	NUpath or Elective	4	Co-op	0
		Linguistics elective	4	Elective	4		
		ENGW 3315	4				
		NUpath or Elective	4				
		0		16		8	

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Laboratory course	4	NUpath or Elective	4	Co-op	0
		Linguistic structure course	4	Elective	4		
		Linguistics elective	4				
		NUpath or Elective	4				
		0		16		8	

##### Year 5

Fall	Hours	Spring	Hours
Co-op	0	Linguistics seminar	4
		Linguistics elective	4
		NUpath or Elective	4
		Elective	4
		0	
		16	

Total Hours: 130

## American Sign Language and Linguistics, BS

The American Sign Language (ASL) & Linguistics combined major is an intensive program of study dedicated to preparing students to interact in a positive and supportive manner with members of the American Deaf Community while simultaneously providing students with an understanding of the theoretical, cultural, and social components of all human language, including ASL, so that they can better understand how ASL is related to spoken languages and other signed languages. This curriculum is designed to assist students in acquiring competence in American Sign Language; and in developing an understanding of the American Deaf Community and its culture, the acquisition and analysis of human languages (signed and spoken), and how human languages work in everyday use (e.g., comprehension, generation, translation).

### Program Requirements

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

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### American Sign Language Requirements

Code	Title	Hours
<b>Language Requirement</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Interpreting</b>		

INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4

### Linguistics Requirements

Code	Title	Hours
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#### Linguistics Foundations

LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4

#### Linguistic Structure

Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

#### Psychology of Language

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4

#### Linguistics Electives

Complete two courses (not counted elsewhere) from the following:

LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
or PSYC 4991	Directed Study Research	
LING 4993	Independent Study	
PSYC 4520	Language and the Brain	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

#### Seminar Requirement

Complete one course (not counted elsewhere) from the following:

LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
PSYC 4658	Seminar in Psycholinguistics	

### Integrative Courses

Code	Title	Hours
DEAF 2700	ASL Linguistics	4
INTP 4940	Interpreting Research Capstone	4
LING 3412	Language and Culture	4

### Combined-Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

### Combined-Major Credit Requirement

Complete 90 semester hours in the major.

### Program Requirements

128 total semester hours required

### Plan of Study

#### Sample, Four Years

Year 1			
Fall	Hours	Spring	Hours
AMSL 1101	4	AMSL 1102	4
DEAF 1500	4	LING 2350	4
LING 1150	4	LING 3412	4
NUpath/Elective	4	NUpath/Elective	4
		16	16
Year 2			
Fall	Hours	Spring	Hours
AMSL 2101	4	AMSL 2102	4
DEAF 2500	4	DEAF 2700	4
PSYC 1101	4	PSYC 2320	4
NUpath/Elective	4	NUpath/Elective	4
		16	16
Year 3			
Fall	Hours	Spring	Hours
AMSL 3101	4	Linguistic Structure course	4
INTP 3500	2	Linguistic Structure course or Linguistics Elective	4
INTP 3510	4	PSYC 3464	4
Linguistic Structure course	4	NUpath/Elective	4
NUpath/Elective	4		
		18	16
Year 4			
Fall	Hours	Spring	Hours
INTP 4940	4	Linguistics Seminar	4
Linguistics Elective or Linguistic Structure course	4	Linguistics Elective	4
NUpath/Elective	4	NUpath/Elective	4
NUpath/Elective	4	NUpath/Elective	4
		16	16

Total Hours: 130

## Computer Science and Linguistics, BS

The computer science and linguistics combined major provides students with extensive background in the formal structures of natural (human) languages, as well as methods and applications of linguistic and psycholinguistic analyses of human language data. This is combined with an emphasis in computer science on artificial intelligence and natural language processing techniques. The major provides excellent preparation for work or more advanced degrees focusing on computational linguistics, natural language processing, speech perception, spoken language interfaces, artificial intelligence, and a wide array of related fields.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	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
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		

With adviser approval, directed study, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 4 credits of CS, CY, DS, or IS courses that are not already required. Choose courses within the following range:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis (Integrative course)	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Laboratory/Directed Study</b>		
Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
PSYC 4610	Laboratory in Psycholinguistics	
<b>Seminar Requirement</b>		
LING 4654 or PSYC 4658	Seminar in Linguistics Seminar in Psycholinguistics	4
<b>Linguistics Elective</b>		
Complete one LING course, not counted elsewhere, numbered 3000-4799, or one of the following:		4
DEAF 2700	ASL Linguistics	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
With prior approval, directed study research, independent study, and Honors Project courses can also be counted:		
LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
LING 4971	Junior/Senior Honors Project 2	

LING 4991	Directed Study Research
PSYC 4991	Directed Study Research

- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

**Supporting Courses**

Code	Title	Hours
<b>Mathematics Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
HIST 2220	History of Technology	
ENGL 2150	Literature and Digital Diversity	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, One Co-op in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200		1 CS 2510 and CS 2511		5 Vacation		Vacation	
CS 1800 and CS 1802	5	LING 2350	4				
CS 2500 and CS 2501	5	Elective	4				
LING 1150	4	PSYC 1101	4				
ENGW 1111	4						
19		17		0		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	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	Linguistic structure	4				
		PSYC 2320	4				
16		17		8		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4120	4	Elective	4	Vacation	
		CS 4400	4	Elective	4		
		Linguistic structure	4				
		ENGW 3302	4				
		THTR 1170	1				
0		17		8		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 4500 or 4530	4	CS 4100	4				
Linguistic structure	4	Khoury elective	4				
LING 4654 or PSYC 4658	4	LING elective	4				

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 20 credits of general electives		20

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Interpreting Culture
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Engaging Difference and Diversity
- Writing in the First Year

Computing and social issues	4 LING lab (or directed study)	4
		16

Total Hours: 134

### Five Years, Three Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	LING 2350	4				
CS 1800 and CS 1802	5	PSYC 1101	4				
LING 1150	4	Elective	4				
ENGW 1111	4						
		19	17	0	0		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	Vacation	0	Co-op	0
MATH 1341	4	CS 3000	4				
LING 3412	4	CS 3800	4				
PSYC 3464	4	Linguistic structure	4				
		PSYC 2320	4				
		16	17	0	0		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4120	4	Elective	4	Co-op	0
		CS 4400	4	Elective	4		
		Linguistic structure	4				
		ENGW 3302	4				
		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
		Khoury elective	4	Elective	4		
		Linguistic structure	4				
		LING lab (or directed study)	4				
		0	16	8	0		

#### Year 5

Fall	Hours	Spring	Hours
Co-op	0	CS 4500 or 4530	4
		LING 4654 or PSYC 4658	4
		LING elective	4

Computing and social issues	4	
		0

Total Hours: 134

## Data Science and Linguistics, BS

The data science and linguistics combined major provides students with extensive background in the formal structures of natural (human) languages and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms. The program teaches the methods and applications of linguistic and psycholinguistic analyses of human language data combined with skills in big data analysis, data science, and data analytics. The major provides excellent preparation for work or more advanced degrees focusing on computational linguistics, natural language processing, machine learning, and a wide array of related fields.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Foundations</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Course**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010
CY 2000 or higher, except CY 4930
DS 2500 or higher, except DS 4900
IS 2000 or higher, except IS 4900

**Linguistics Requirements**

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4

**Linguistic Structure**

Complete three of the following:	12
LING 3420	Phonetics
LING 3422	Phonology
LING 3424	Morphology
LING 3450	Syntax
LING 3452	Semantics

**Psychology Requirements**

PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4

**Laboratory/Directed Study**

Complete one of the following:	4
LING 4891	Research Seminar in Linguistics
LING 4991	Directed Study Research
PSYC 4610	Laboratory in Psycholinguistics

**Seminar Requirement**

LING 4654	Seminar in Linguistics	4
or PSYC 4658	Seminar in Psycholinguistics	

**Linguistics Elective**

Complete one LING course, not counted elsewhere, numbered 3000–4799, or one of the following:	4
DEAF 2700	ASL Linguistics
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

With prior approval, directed study research, independent study, and Honors Project courses can also be counted:

LING 4891	Research Seminar in Linguistics
LING 4970	Junior/Senior Honors Project 1
LING 4971	Junior/Senior Honors Project 2

LING 4991	Directed Study Research
PSYC 4991	Directed Study Research

**Supporting Courses**

Code	Title	Hours
<b>Mathematics Requirement</b>		
A grade of C– or better is required:		
MATH 1341	Calculus 1 for Science and Engineering	4

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
CS 4120	Natural Language Processing	4

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 20 credits of general electives.		20

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Elective	4	
CS 1800 and CS 1802	5	LING 2350	4	PSYC 1101	4	Elective	4	
CS 2500 and CS 2501	5	CS 3200	4					
LING 1150	4	MATH 1341	4					
ENGW 1111	4							
		19			17			8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
LING 3412	4	CS 1210	1	PSYC 2320	4	Co-op		
DS 3000	4	DS 4200	4	Elective	4			
PSYC 3464	4	Linguistic structure	4					
Linguistic structure	4	LING elective	4					



		Elective	4				
		16	17	8	0		
<b>Year 3</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4120	4	ENGW 3302	4	Co-op	
		DS 4300	4	Elective	4		
		DS 4400	4				
		THTR 1170	1				
		Linguistic structure	4				
		0	17	8	0		
<b>Year 4</b>							
Fall	Hours	Spring	Hours				
Co-op		DS 4900	4				
		Khoury elective	4				
		LING lab (or directed study)	4				
		LING seminar	4				
		0	16				

Total Hours: 134

### Five Years, Three Co-ops in Summer 2/Fall

<b>Year 1</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 3200	4				
CS 1800 and CS 1802	5	LING 2350	4				
LING 1150	4	PSYC 1101	4				
ENGW 1111	4						
		19	17	0	0		
<b>Year 2</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	Vacation	0	Co-op	0
MATH 1341	4	DS 3000	4				
LING 3412	4	PSYC 2320	4				
PSYC 3464	4	Linguistic structure	4				
		Elective	4				
		16	17	0	0		
<b>Year 3</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistic structure	4	Elective	4	Co-op	0
		DS 4300	4	Elective	4		
		DS 4200	4				
		ENGW 3302	4				
		THTR 1170	1				
		0	17	8	0		

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4400	4	Elective	4	Co-op	0
		CS 4120	4	Elective	4		
		Linguistic structure	4				
		LING lab (or directed study)	4				
		0	16	8	0		

#### Year 5

Fall	Hours	Spring	Hours
Co-op	0	DS 4900	4
		LING seminar	4
		LING elective	4
		Khoury elective	4
		0	16

Total Hours: 134

## Linguistics and Cultural Anthropology, BS

The combined major in linguistics and cultural anthropology focuses on the relationship of culture to the institutions, interpersonal relations, and practices that make up their social structure while emphasizing the structure of human language and its involvement in social interaction and culture. Students examine how language both reflects and influences cultural phenomena and how it can be used as a tool to study those phenomena; and they apply their interests across a range of connected courses, co-op opportunities, and potential research projects.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Linguistics Major Language Requirement

Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.

### Linguistics Requirements

Note: A grade of C or higher is required for all courses in this section.

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3442	Sociolinguistics	4
LING 3456	Language and Gender	4

<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

<b>Linguistics Elective</b>		
Complete one of the following (not counted elsewhere):		4
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

<b>Linguistics Research</b>		
Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	

**Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 4600	Senior Seminar	4

<b>Anthropology Advanced Area Courses</b>		
Complete three of the following:		12
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

<b>Anthropology Electives</b>	
Complete three ANTH courses not already taken.	12

**Linguistics/Anthropology Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
LING 3412	Language and Culture	4

**Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Linguistics/Anthropology Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**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
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

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Foreign language course		LING 3442	4	Vacation		Co-op
Linguistic structure course	4	Linguistic structure course	4			
Anthropology elective	4	Anthropology elective	4			
Elective	4	Elective	4			
		16		16		0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		LING 3456	4	Elective	4	Co-op
		Linguistic structure course	4	Elective	4	
		Anthropology elective	4			
		Elective	4			
		0		16		8

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		Linguistics elective	4	Elective	4	Co-op

Anthropology advanced area course	4	Elective	4
Anthropology advanced area course	4		
ENGW 3315	4		
0	16	8	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ANTH 4600	4
Anthropology advanced area course	4		
Linguistics research	4		
Elective	4		
0	16		

Total Hours: 128

**Four Years, No Co-op****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation		Vacation	
ANTH 1101	4	ANTH 2305	4				
ENGW 1111	4	LING 3412	4				
MATH 1215	4	Foreign language course	4				
16		16		0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course	4	LING 3442	4	Vacation		Vacation	
Linguistic structure course	4	Linguistic structure course	4				
Anthropology elective	4	Anthropology elective	4				
Elective	4	Elective	4				
16		16		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Anthropology elective	4	LING 3456	4	Vacation		Vacation	
Anthropology advanced area course	4	Linguistic structure elective	4				
Elective	4	Anthropology advanced area course	4				
ENGW 3315	4	Elective	4				
16		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours
Linguistics research	4	ANTH 4600	4
Anthropology advanced area course	4	Linguistics elective	4
Elective	4	Elective	4
Elective	4	Elective	4
16		16	

Total Hours: 128

**Linguistics and Psychology, BS**

This combined major is designed to educate students in psychology, linguistics, and the interface between the two disciplines, which are core areas within the field of cognitive science. Students study the formal structures of human language; sociocultural aspects of language use; and the cognitive aspects of language representations, language acquisition, and language processing. Students receive interdisciplinary training in the methods of experimental psychology, psycholinguistics, and linguistic analysis.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Linguistics Requirements**

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete three of the following (not counted elsewhere):		12
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	

LING 3434	Bilingualism
LING 3442	Sociolinguistics
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics
LING 3460	Historical Linguistics
LING 4654	Seminar in Linguistics
LING 4891	Research Seminar in Linguistics
or LING 4970	Junior/Senior Honors Project 1
or LING 4971	Junior/Senior Honors Project 2
or LING 4991	Directed Study Research
LING 4993	Independent Study
PHIL 1115	Introduction to Logic

## Psychology Requirements

Code	Title	Hours
<b>Introductory and Intermediate Psychology</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<b>Advanced Psychology</b>		
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
<b>Psychology Lab</b>		
Complete one of the laboratory courses or, with prior approval, a directed study or honors project on a topic related to psycholinguistics or cognition:		4
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4970	Junior/Senior Honors Project 1	
PSYC 4971	Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
<b>Psychology Electives</b>		
A directed study on a topic related to psycholinguistics or cognition may be taken with prior approval.		
Complete two of the following (not counted elsewhere):		8
PSYC 3404	Developmental Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4658	Seminar in Psycholinguistics	

PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4991	Directed Study Research

## Integrative Requirements

Code	Title	Hours
PSYC 3464	Psychology of Language	4
<i>Experiential Learning</i>		
Complete one of the following options. Courses used to satisfy this requirement will also typically simultaneously satisfy a requirement above.		0-8
Study Abroad (not a Dialogue)		
International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
PSYC 4970 and PSYC 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	

## Supporting Courses

Code	Title	Hours
<b>Language Requirement</b>		
Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.		8
<b>Mathematics Requirement</b>		
Complete one of the following:		4
CS 1800	Discrete Structures	
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

## Linguistics and Psychology Combined Major Credit Requirement

Complete 72 semester hours in the major (excluding supporting courses).

## Program Requirement

128 total semester hours required

**Plan of Study****Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation	0	Vacation	0
PSYC 1101	4	PSYC 3464	4				
ENGW 1111	4	Foreign language course	4				
Math requirement	4	NUpath or elective	4				
	16		16		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	Linguistics structure course	4	Vacation	0	Co-op	0
PSYC 2320	4	Linguistics elective	4				
PSYC 3466	4	PSYC 3402	4				
Foreign language course	4	Psychology elective	4				
		EESC 2000	1				
	16		17		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistics structure course	4	NUpath or elective	4	Co-op	0
		Linguistics or psychology elective	4	Elective	4		
		Psychology laboratory	4				
		ENGW 3315	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistics structure course	4	NUpath or elective	4	Co-op	0
		Linguistics elective	4	Elective	4		
		Linguistics or psychology elective	4				
		Psychology seminar	4				
	0		16		8		0

Year 5			
Fall	Hours	Spring	Hours
Co-op	0	NUpath or elective	4
		Elective	4

Elective	4
Elective	4
0	16

Total Hours: 129

**Sample Four Years, No Co-op**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation	0	Vacation	0
PSYC 1101	4	PSYC 3464	4				
ENGW 1111	4	Foreign language course	4				
Math requirement	4	NUpath or elective	4				
	16		16		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	Linguistics structure course	4	Vacation	0	Vacation	0
PSYC 2320	4	Linguistics elective	4				
PSYC 3466	4	PSYC 3402	4				
Foreign language course	4	Psychology elective	4				
	16		16		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Linguistics structure course	4	Linguistics structure course	4	Vacation		Vacation	
Linguistics elective	4	Linguistics or psychology elective	4				
Psychology lab	4	NUpath or elective	4				
ENGW 3315	4	Elective	4				
	16		16		0		0

Year 4			
Fall	Hours	Spring	Hours
Linguistics or psychology elective	4	NUpath or elective	4
Psychology seminar	4	Elective	4
NUpath or elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 128

## Linguistics and Speech-Language Pathology and Audiology, BS

The combined major in linguistics and speech-language pathology and audiology provides students with extensive background in the formal structures of human language; the methods and applications of linguistic analyses of language data; the biology, neurology, and physics of the human vocal tract; and the nature of both normal and disordered human speech communication and language development. Students have an opportunity to develop critical thinking, information literacy, and strong oral and written communication skills. While on co-op, students gain clinical experience, including preprofessional training appropriate to pursue a graduate degree in SLPA, related clinical healthcare domains, or education.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
LING 3420	Phonetics (Integrative course)	4
LING 3422	Phonology	4
LING 3450	Syntax	4
LING 3424	Morphology	4
or LING 3452	Semantics	
<b>Psychology Requirements</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Linguistics Elective</b>		
Complete one of the following, not counted elsewhere:		4
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	

LING 4970	Junior/Senior Honors Project 1
LING 4971	Junior/Senior Honors Project 2
LING 4991	Directed Study Research
LING 4993	Independent Study
PSYC 3404	Developmental Psychology
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics

### Speech-Language Pathology and Audiology Requirements

Code	Title	Hours
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All courses in these sections must be completed with a C or better.

<b>Speech-Language Pathology and Audiology</b>		
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1102	Language Development	4
SLPA 1103	Anatomy and Physiology of Speech and Hearing Mechanism	4
SLPA 1203	Introduction to Audiology	4
SLPA 1205	Speech and Hearing Science	4
SLPA 4651	Speech Disorders across the Life Span	4
SLPA 5107	Clinical Procedures	4
SLPA 5110	Language Disorders across the Life Span	4
SLPA 6219	Aural Rehabilitation	4

<b>Biology and Physics Requirements</b>		
BIOL 2217 and BIOL 2218	Integrated Anatomy and Physiology 1 and Lab for BIOL 2217	5
BIOL 2219 and BIOL 2220	Integrated Anatomy and Physiology 2 and Lab for BIOL 2219	5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

### Integrative Requirement

Code	Title	Hours
The following course is taken in another area of the major:		
LING 3420	Phonetics	4

### Supporting Courses

Code	Title	Hours
ENGW 3306	Advanced Writing in the Health Professions	4
HLTH 2100	Interprofessional Ethics for Individual and Population Health	4
or PHIL 1165	Moral and Social Problems in Healthcare	
PHTH 2300	Communication Skills for the Health Professions	4

### Major Credit Requirement

Complete 104 hours in the major.

### Program Requirements

128 total semester hours required



## Plan of Study

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2217 and BIOL 2218	5	BIOL 2219 and BIOL 2220	5	Vacation		Vacation	
ENGW 1111	4	LING 2350	4				
PSYC 1101	4	SLPA 1101	4				
LING 1150	4	SLPA 1205	4				
SLPA 1000 or LING 1000	1						
	18		17		0		0

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3420	4	Co-op		Co-op		Elective	4
PHYS 1145 and PHYS 1146	5					Elective	4
SLPA 1103	4						
SLPA 1203	4						
SLPA 2000	1						
	18		0		0		8

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3306	4	HLTH 2100 or PHIL 1165	4	Vacation		Elective	4
LING 3422 or 3450	4	LING 3422 or 3450	4			Elective	4
PHTH 2300	4	PSYC 3464	4				
PSYC 2320	4	SLPA 1102	4				
	16		16		0		8

### Year 4

Fall	Hours	Spring	Hours
LING 3412	4	LING 3424 or 3452	4
SLPA 5107	4	SLPA 4651	4
SLPA 5110	4	SLPA 6219	4
Linguistics elective	4	Elective	4
	16		16

Total Hours: 133

## Linguistics and Communication Studies, BA

In the combined major in linguistics and communication studies, students learn about the formal structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) while simultaneously mastering the fundamentals of effective communication and of communication theory and practice. Students receive extensive training in writing and speaking, both for a technical audience and more generally; and they explore the role of language and communication in society, both from a broad theoretical perspective and in narrower, more focused and applied domains.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two of the following (not counted elsewhere):		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	
or LING 4971	Junior/Senior Honors Project 2	
or LING 4991	Directed Study Research	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

## Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Required Courses</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
COMM 2301	Communication Research Methods	4
<b>Foundation Course</b>		
Complete one course from the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one course from the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Course</b>		
Complete one course from the following:		4
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 3610	Communication, Politics, and Social Change	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	
<b>Communication Studies Electives</b>		
Complete two additional COMM courses		8
<b>Integrative Requirement</b>		
Code	Title	Hours
<b>Sociolinguistics</b>		
LING 3442	Sociolinguistics	4
<b>Communication Studies Integrative Course</b>		
Complete one of the following, not used to fulfill above requirements:		4
COMM 3415	Communication Criticism	
COMM 4602	Contemporary Rhetorical Theory	
<b>Capstone Experience</b>		
Complete one of the following, not used to fulfill above requirements:		4

LING 4654	Seminar in Linguistics
COMM 4102	Health Communication Campaigns
COMM 4530	Communication and Quality of Life
COMM 4533	Consultation Skills
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities

## Communication Studies Grade Requirement

No more than two grades below a C in communication studies courses may be used to fulfill degree requirements.

## Linguistics and Communication Studies Combined Major Credit Requirement

Complete 76 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Patterns:

#### Four Years, Two Summer 2/Fall Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1000	1	LING 2350	4	COMM Studies Elective	4	Elective	4
LING 1150	4	LING 3412	4	Elective	4	Elective	4
COMM 1101	4	COMM Studies Foundation Course	4				
COMM 1112	4	Elective	4				
ENGW 1111	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Linguistic Structure or Linguistics Elective	4	Linguistic Structure or Linguistics Elective	4	COMM Studies Elective	4	COOP	4
COMM 2301	4	LING 3442 (Or Linguistics Elective)	4	Elective	4		
COMM Studies Cluster Course	4	COMM Studies Elective	4				
Foreign Language Course	4	Foreign Language Course	4				
EEAM 2000 or EESC 2000	1						
		17		16		8	
						0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COOP		Linguistic Structure or Linguistics Elective	4	COMM Studies Writing Intensive	4	COOP	4
		LING 3442 (or Linguistics Elective)	4	Elective	4		
		ENGW 3315	4				
		Foreign Language Course	4				
	0		16		8		0

Year 4			
Fall	Hours	Spring	Hours
COOP		Linguistic Structure or Linguistics Elective	4
		COMM 3415 or 4602	4
		COMM Studies Writing Intensive	4
		Integrative Capstone Experience	4
	0		16

Total Hours: 130

### Five Years, Three Summer 2/Fall Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1000	1	LING 2350	4	Vacation	0	Vacation	0
LING 1150	4	LING 3412	4				
COMM 1101	4	COMM Studies Foundation Course	4				
COMM 1112	4	Elective	4				
ENGW 1111	4						
	17		16		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Linguistic Structure or Linguistics Elective	4	Linguistic Structure or Linguistics Elective	4	Vacation	0	COOP	0
COMM 2301	4	COMM Studies Elective	4				
COMM Studies Cluster Course	4	Foreign Language Course	4				

Foreign Language Course	4	COMM Studies Elective	4
		EEAM 2000 or EESC 2000	1
	16		17
			0
			0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COOP	0	Linguistic Structure or Linguistics Elective	4	COMM Studies Elective	4	COOP	0
		LING 3442 (or Linguistics Elective)	4	Elective	4		
		ENGW 3315	4				
		Foreign Language Course	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COOP	0	Linguistic Structure or Linguistics Elective	4	Elective	4	COOP	0
		LING 3442 (or Linguistics Elective)	4	Elective	4		
		COMM Studies Writing Intensive	4				
		Elective	4				
	0		16		8		0

Year 5			
Fall	Hours	Spring	Hours
COOP	0	COMM 3415 or 4602	4
		Integrative Capstone Experience	4
		COMM Studies Elective	4
		Elective	4
	0		16

Total Hours: 130

## Linguistics and English, BA

In the combined major in linguistics and English, students learn about the structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) and apply this knowledge to understanding how the English language works, its rhetorical forms, how it has changed over time, and its cultural context.

Students hone their writing skills, develop substantial language-analysis skills, and apply them particularly to English.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
LING 3442	Sociolinguistics	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two courses (not used elsewhere) from the following:		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	

or LING 4971	Junior/Senior Honors Project 2
or LING 4991	Directed Study Research
LING 4993	Independent Study
PHIL 1115	Introduction to Logic
PSYC 3464	Psychology of Language
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
At least two of the courses chosen from the English Requirements lists below must be numbered 3000–4999.		
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses:		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 Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		

Complete one of the following:	4
ENGL 2330	The American Renaissance
ENGL 3619	Emerson and Thoreau
ENGL 3720	19th-Century Major Figure
ENGL 4040	Topics in 19th-Century Literatures
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following:	4
ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to 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 4400	Opening the Archive
ENGL 4410	Research in Rhetoric and Writing

**Comparative Literature**

Complete one of the following:	4
ENGL 1120	Trouble in Utopia
ENGL 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following:	4
ENGL 2700	Creative Writing

ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Topics in Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Electives**

Complete one additional ENGL elective at the 2000 level or higher.	4
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**Linguistics/English Combined-Major Requirements**

Code	Title	Hours
<b>Integrative Course</b>		
LING 3454	History of English	4
<b>Junior/Senior Seminar</b>		
ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	
or LING 4654	Seminar in Linguistics	
<b>Experiential Learning</b>		
Complete one of the following options. Courses used to satisfy this requirement may simultaneously satisfy a requirement above.		0-8
Study Abroad (not a Dialogue)		
International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4970	Junior/Senior Honors Project 1	
and LING 4971	and Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	

**Linguistics/English Combined Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study****Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation	0	Vacation	0
ENGW 1111	4	ENGL 1400	4				
MATH 1215	4	Foreign language core course	4				
Elective	4	Elective	4				
	16		16		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3454	4	Linguistic structure course	4	Vacation	0	Co-op	0
Linguistics elective	4	LING 3412 or 3442	4				
ENGL 1410 or 1160	4	Theories and methods course	4				
Foreign language core course	4	Diversity course	4				
		EESC 2000	1				
		16	17	0	0		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistic structure course	4	Elective	4	Co-op	0
		Pre-19th century literature course	4	Elective	4		
		Comparative literature course	4				
		ENGW 3315	4				
		0	16	8	0		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	LING 3412 or 3442	4	Elective	4	Co-op	0
		Linguistics structure course	4	Elective	4		
		Writing course	4				
		19th-, 20th-, and 21st-century literature course	4				
		0	16	8	0		

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistics elective	4				
		Junior/senior seminar	4				
		Foreign language core course	4				
		English elective	4				
		0	16				

Total Hours: 129

## Linguistics, Minor

The minor in linguistics provides students with an overview of the field, including exposure to both the structural and socio-cultural aspects of the study of language. Students have an opportunity to learn the methods of linguistic analysis and to obtain more advanced exposure to various subdomains of linguistics.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Linguistics Foundations

Code	Title	Hours
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4

### Linguistic Structure

Code	Title	Hours
Complete two of the following:		8
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

### Elective

Code	Title	Hours
Complete one course (not counted elsewhere) from the following range:		4
LING 2000 to LING 4996		

### GPA Requirement

2.000 GPA required in the minor

## Marine and Environmental Sciences

Website (<http://www.northeastern.edu/mes/>)

### Geoffrey C. Trussell, PhD

Professor and Chair

### Jennifer Bowen, PhD

Associate Professor and Associate Chair

14 Holmes Hall  
617.373.3176  
617.373.4378 (fax)

The academic programs of the Department of Marine and Environmental Sciences provide students a deep, multidisciplinary understanding of the chemical, physical, geological, and biological processes that shape Earth's myriad ecosystems. This fundamental understanding, coupled with a focus on the many environmental challenges facing our planet, seeks to yield knowledge and solutions that promote sustainability. Our graduates leave Northeastern prepared to address diverse issues including collapsing fisheries, the impacts of climate change (e.g., sea level rise), coastal erosion, and pollution. To address and solve today's complex environmental problems, environmental professionals



are expected to work effectively as part of a multidisciplinary team containing natural and social scientists, engineers, and policymakers. Hence, our undergraduate program emphasizes experiential education in addition to traditional classroom learning. This approach better prepares students to engage in collaborative work and enhances their employment opportunities after Northeastern.

Our Bachelor of Science in Environmental and Sustainability Science degree is organized for students who seek a comprehensive understanding of the scientific implications of environmental problems and the multidisciplinary solutions that environmental scientists can produce to solve them. All students take foundational courses in Earth science, ecology, and sustainability. They then choose from one of four concentrations for deeper learning. For students interested in understanding how physical and geochemical processes shape existing and emerging environmental threats, they can concentrate in earth, oceans, and environmental change. If students are interested in how ecological and evolutionary processes influence our ability to conserve, restore, and manage ecosystems, they can focus on our conservation, restoration, and management concentration. Our concentration in sustainable planning and development is designed for students who want to examine how science informs the nexus of food, water, and energy to promote greater sustainability. Lastly, students who are interested in leveraging a strong scientific foundation to study coupled human and natural systems in search of solutions most threatened by environmental change can focus on our concentration in environment and society. Students interested in the intersection of environmental science and the humanities can participate in our interdisciplinary Bachelor of Arts in Environmental Studies (<http://catalog.northeastern.edu/undergraduate/science/marine-environmental/environmental-studies-ba/>).

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 (MSC) in Nahant, though many courses that satisfy this major are also offered on Northeastern's main campus in Boston. Students in this major study all aspects of marine systems from invertebrate zoology to oceanography. For those students seeking a broader foundation that is not focused on marine systems, we also offer a Bachelor of Science in Ecology and Evolutionary Biology (EEB). Students majoring in EEB develop a strong theoretical foundation in ecology and evolution while also building practical skills in data science, genomics, and other areas at the cutting edge of science. Our core curriculum for both marine biology and EEB satisfy the vast majority of requirements for prehealth fields including veterinary sciences and medical fields.

We offer a number of combined majors in both the BA track and the BS track. Students are also able to create their own combined majors with approval from faculty committees in both departments.

Fieldwork is a critical component of training in our programs, and many of our courses use field sites throughout New England to explore environmental processes or problems in their full complexity. In addition to sponsoring local trips, our students also participate in longer field excursions to places like Iceland, Antarctica, the Florida Keys, the Cascade Mountains of Washington, and many others. Students also have the option to complete undergraduate research experiences with a faculty member. Undergraduate research projects can involve fieldwork and/or lab work guided by faculty mentors, and many projects evolve into senior and honors theses.

Our graduates work across a wide range of disciplines. Student training in the foundations of each major, coupled with extensive training in data science and scientific communication, allows our students to succeed in a range of positions from hydrology to public policy to

oceanography. We have graduates working as environmental lawyers; lobbyists; consultants; planners; data analysts; educators; soil, air, and water quality technicians; veterinarians; foresters; geneticists; bioinformaticians; research divers; aquaculturists; and many more fascinating fields.

### Three Seas Program

Three Seas is an accelerated, research-focused, graduate-level program that allows advanced undergraduate and beginning graduate students in marine biology and related areas to spend a year of field study in three distinct marine environments. As a prime example of Northeastern University's innovative teaching initiative, Three Seas emphasizes experiential learning by providing students with hands-on research experience to develop the critical skills needed to succeed in a career in science.

The program begins with students spending a semester studying the classic rocky intertidal and salt marsh ecosystems at Northeastern University's Marine Science Center (MSC) in Nahant, 12 miles north of the main campus. The following semester, the program travels abroad to both the University of Washington's Friday Harbor Laboratories (FHL) and to the Smithsonian Tropical Research Institute (STRI).

FHL, located on San Juan Island, is 70 miles north of Seattle and part of an archipelago that lies between the mainland and Vancouver Island. In the cold and well-mixed waters of the Puget Sound, students study rocky shores, mudflats, sand beaches, kelp forests, and a range of subtidal environments.

STRI is located in the town of Bocas del Toro, on Isla Colon, an island on the northern Caribbean side of Panama. Students study Panama's tropical ecosystem on both the Caribbean and Pacific coasts, which includes fringing coral reefs, seagrass, and mangrove habitats.

For more information, visit the Three Seas Program website at [www.northeastern.edu/threeseas](http://www.northeastern.edu/threeseas) (<http://www.northeastern.edu/threeseas/>).

### Marine Science Center Summer Internship Program in Marine Science

The summer program allows students to participate in intensive research at the Marine Science Center (MSC). Students conduct independent research at the MSC laboratory primarily in the summer, but these experiences can also extend throughout the year.

### Academic Progression Standards

Same as college standards.

## Programs

### Bachelor of Arts (BA)

- Environmental Studies (p. 637)
- Environmental Studies and History (p. 641)
- Environmental Studies and International Affairs (p. 642)
- Environmental Studies and Philosophy (p. 646)
- Environmental Studies and Political Science (p. 647)
- Sociology and Environmental Studies (p. 651)

### Bachelor of Science (BS)

- Environmental and Sustainability Sciences (p. 651)
- Environmental Science (p. 655)
- Environmental Science and Landscape Architecture (p. 71)
- Ecology and Evolutionary Biology (p. 661)

- Marine Biology (p. 664)
- Computer Science and Environmental Science (p. 346)
- Data Science and Environmental Science (p. 398)
- Data Science and Ecology and Evolutionary Biology (p. 393)
- Environmental Science and Chemistry (p. 613)
- Environmental Studies and Economics (p. 677)

### Minors

- Ecology and Evolutionary Biology (p. 678)
- Environmental Studies (p. 679)
- Environmental and Sustainability Sciences (p. 679)
- Geosciences (p. 680)
- Marine Sciences (p. 680)

## Environmental Studies, BA

14 Holmes Hall  
617.373.3176  
617.373.4378 (fax)

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 introductory-to 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. 655).)

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 broad-based 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Environmental Studies Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
<b>Science Courses</b>		
<i>Required Science Courses</i>		
ENVR 1101	Environmental Science	4
ENVR 1110	Global Climate Change	4
Complete one of the following:		
CHEM 1101 and CHEM 1102 and CHEM 1103	General Chemistry for Health Sciences and Lab for CHEM 1101 and Recitation for CHEM 1101	5
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 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 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
PHYS 1171 and PHYS 1172 and PHYS 1173	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171	
<b>Ethics Course</b>		
PHIL 1180 or PHIL 1185	Environmental Ethics The Ethics of Food	4
<b>Economics Course</b>		
ECON 1116	Principles of Microeconomics	4
<b>Sociology Course</b>		
SOCL 1246	Environment and Society	4
<b>Law and Political Science Courses</b>		
POLS 1150 and POLS 1151	American Government and Recitation for POLS 1150	4
POLS 2395 or LPSC 2301	Environmental Politics and Policy Introduction to Law, Policy, and Society	4
<b>Environmental Impact Courses</b>		
ENVR 1112 or ENVR 1200	Environmental Geology Dynamic Earth	4
ENVR 2900	Special Topics in Environmental Studies	4

or EEMB 3460	Conservation Biology	
ENVR 4515		4
ENVR 5210	Environmental Planning	4
<b>Statistics Course</b>		
Complete one of the following:		4
ECON 2350	Statistics	
MATH 2280	Statistics and Software	
POLS 2400	Quantitative Techniques	
SOCL 2320	Statistical Analysis in Sociology	
<b>Senior Thesis</b>		
ENVS 4997	Senior Thesis	1-4
or ENVR 4900	Earth and Environmental Science Capstone	

## Environmental Studies Cluster

Complete one of the following clusters:

Code	Title	Hours
<b>International Cluster</b>		
Select six of the following:		24
ECON 3404	International Food Policy	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
INTL 2240	Global Population and Development	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2395	Environmental Politics and Policy	
SOCL 3485	Environment, Technology, and Society	
SOCL 4522	Political Ecology and Environmental Justice	
<i>Dialogue of Civilizations Restricted Courses</i>		
CIVE 4540	Resource Recovery and Waste Treatment Technologies Abroad	
CIVE 4778	Climate Adaptation and Policy Abroad	
ENVR 5202	Environmental Science Field Seminar Abroad	
<b>Marine Cluster</b>		
Select six of the following:		17-25
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 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 4505	Wetlands	
ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242	
<i>Marine Studies Consortium Courses (unrestricted)</i>		
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	

## Policy Cluster

ECON 3423	Environmental Economics	
ECON 3425	Energy Economics	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
PPUA 5260	Ecological Economics	
PPUA 5270	Food Systems and Public Policy	
SOCL 4522	Political Ecology and Environmental Justice	

## Sustainability Cluster

CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
ENVR 4505	Wetlands	
INTL 2240	Global Population and Development	
LARC 5210	Landscape Ecology	
<i>Marine Studies Consortium Courses (unrestricted)</i>		
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 3420	Urban Economic Issues	
ECON 3422	Economics of Transportation	
ECON 3423	Environmental Economics	
LARC 5210	Landscape Ecology	
POLS 2345	Urban Policies and Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
SOCL 3485	Environment, Technology, and Society	
SOCL 4522	Political Ecology and Environmental Justice	

## Water Cluster

CIVE 2334	Environmental Engineering: Principles, Technology, and Sustainability
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
ENVR 4505	Wetlands
<i>Marine Studies Consortium Courses (unrestricted)</i>	
MARS 3310	Water Resources Policy and Management
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 and POLS 1151	4	ENVR 1112 or 1200	4					
SOCL 1246	4	PHIL 1180 or 1185	4					
Foreign language course	4							
		17			16			8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
EESC 2000	1	Co-op	0	Co-op	0	Cluster course	4	
ENVR 1110	4					Elective	4	
ENVR 2900 or EEMB 3460	4							
Foreign language course	4							
Science course	5							
		18			0			0
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ENVR 5210	4	Co-op	0	Co-op	0	Cluster course	4	
POLS 2395 or LPSC 2301	4					Elective	4	

Cluster course	4								
Foreign language course	4								
Statistics course	4								
		20			0			0	8
Year 4									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
ENGW 3303, 3307, 3308, or 3315	4	ENVS 4997 or ENVR 4900	4	Cluster course	4				
ENVR 4515	4								
Cluster course	4	Elective	4						
Cluster course	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	1	ECON 1116	4	Elective	4	Elective	4	
ENVR 1101	4	ENGW 1111	4	Elective	4	Elective	4	
POLS 1150 and POLS 1151	4	ENVR 1112 or 1200	4					
SOCL 1246	4	PHIL 1180 or 1185	4					
Foreign language course	4							
		17			16			8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ENVR 2900 or EEMB 3460	4	EESC 2000	1	Cluster course	4	Co-op	0	
POLS 2395 or LPSC 2301	4	ENVR 1110	4	Elective	4			
Cluster course	4	ENVR 4515	4					
Foreign language course	4	Cluster course	4					
Statistics course	4	Science course	5					
		20			18			8
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Co-op	0	ENGW 3303, 3307, 3308, or 3315	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	0	ENVS 4997 or ENVR 4900	1-4
Cluster course		4	
Elective		4	
Elective		4	
	0	13-16	

Total Hours: 132-135

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	ECON 1116	4	Vacation	0	Vacation	0
ENVR 1101	4	ENGW 1111	4				
POLS 1150 and POLS 1151	4	ENVR 1112 or 1200	4				
SOCL 1246	4	PHIL 1180 or 1185	4				
Foreign language course	4						
	17		16		0		0

**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 or EEMB 3460	4						
Foreign language course	4						
Science course	5						
	18		0		0		8

**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 or LPSC 2301	4					Elective	4
Cluster course	4						
Foreign language course	4						

Statistics course	4			
	20	0	0	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 5210	4	Co-op	0	Co-op	0	Vacation	0
Cluster course	4						
Cluster course	4						
Elective	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
ENGW 3303, 3307, 3308, or 3315	4	ENVS 4997 or ENVR 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**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	ECON 1116	4	Vacation	0	Vacation	0
ENVR 1101	4	ENGW 1111	4				
POLS 1150 and POLS 1151	4	ENVR 1112 or 1200	4				
SOCL 1246	4	PHIL 1180 or 1185	4				
Foreign language course	4						
	17		16		0		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
POLS 2395 or LPSC 2301	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	4	Elective	4	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	0	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			
Fall	Hours	Spring	Hours
Co-op	0	ENVS 4997 or ENVR 4900	1-4
		Cluster course	4
		Elective	4
		Elective	4
	0		13-16

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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Environmental Studies Requirements

Code	Title	Hours
<b>Science Requirements</b>		
ENVR 1101	Environmental Science	4
ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History	5
ENVR 1110	Global Climate Change	4
<b>Humanities Requirement</b>		
PHIL 1180	Environmental Ethics	4
<b>Social Science Requirements</b>		
ECON 1116	Principles of Microeconomics	4
POLS 1150 and POLS 1151	American Government and Recitation for POLS 1150	4
SOCL 1246	Environment and Society	4
<b>Environmental Studies Requirements</b>		
ECON 3423	Environmental Economics	4
POLS 2395	Environmental Politics and Policy	4

### History Requirements

Code	Title	Hours
<b>History Requirements</b>		
HIST 1130	Introduction to the History of the United States	4
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	4
HIST 1201	First-Year Seminar	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4
<b>History Seminar</b>		
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5
<b>History/Geographic-Area Electives</b>		
Complete two of the following:		8
ASNS 1150	East Asian Studies	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
<b>History-Area Electives</b>		
Complete four HIST courses, approved by a faculty adviser, focused on an idea or geographic area. These courses must be numbered 2000 or higher.		16

### Integrative Courses

Code	Title	Hours
<b>Required Integrative Course</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5



**Integrated Elective**

ENVR 5210	Environmental Planning	4
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**Experiential Learning and Capstone**

Code	Title	Hours
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**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 and ENVR 1203	5	Vacation	0	Vacation	0
ENVR 1000	1	HIST 1170	4				
ENVR 1101	4	HIST 1201	4				
HIST 1130	4	PHIL 1180	4				
SOCL 1246	4						
	17		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1116	4	EESC 2000	1	Vacation	0	Co-op	0
Foreign language course	4	Elective	4				
HIST 1215	4	ENVR 1110	4				
History elective	4	Foreign language course	4				
		HIST geographic elective	4				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENVR 3300 and ENVR 3301	5	Elective	4	Co-op	0
		POLS 1150 and POLS 1151	4	Elective	4		

Foreign language course 4

ENVR undergraduat elective 4

0 17 8 0

**Year 4**

Fall Hours Spring Hours Summer 1 Hours Summer 2 Hours

Co-op 0 ENGW 3308 or 3315 4 Elective 4 Co-op 0

HIST 2301 and HIST 2302 5 Elective 4

History elective 4

History elective 4

0 17 8 0

**Year 5**

Fall Hours Spring Hours

Co-op 0 Capstone course 1-3

ENVR undergraduat elective 4

HIST geographic elective 4

Integrative major requirement 4

History elective 4

0 17-19

Total Hours: 134-136

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Environmental Studies Requirements

Code	Title	Hours
<b>Social Science Component</b>		
<i>Philosophy</i>		
PHIL 1180	Environmental Ethics	4
<i>Political Science</i>		
POLS 2395	Environmental Politics and Policy	4
<i>Sociology</i>		
SOCL 1246	Environment and Society	4
<b>Science Component</b>		
<i>Biology</i>		
BIOL 1141 or BIOL 1143	Microbes and Society Biology and Society	4
<i>Earth and Environmental Sciences</i>		
Complete one of the following:		4
ENVR 1110	Global Climate Change	
ENVR 1112	Environmental Geology	
ENVR 1200	Dynamic Earth	
<i>Environment</i>		
ENVR 1101	Environmental Science	4
<i>Quantitative Methods</i>		
Complete one of the following:		4-5
EEMB 5522	Experimental Design Marine Ecology	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
ENVR 2330	Field Methods in Global Change	
INTL 2718	Research Methods in International Affairs	
MATH 2280	Statistics and Software	
<i>Planning</i>		
ENVR 5210	Environmental Planning	4

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	

INTL 5200 Political Economy: Interdisciplinary Perspectives

<b>Global Dynamics</b>		8
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 4630	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 4918	Model NATO	
POLS 3430	Revolution, Civil War, and Insurrection	

### Globalization

ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
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INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 adviser. See department for additional courses.	8

**Africa**

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
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
INTL 4350	Ethnography of Southeast Asia
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism
<b>Europe</b>	
CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union
<b>Latin America</b>	
ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies
<b>Middle East</b>	
CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates

PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Courses**

Code	Title	Hours
<b>Integrative Courses</b>		
ECON 3423	Environmental Economics	4
or ECON 3290	History of the Global Economy	
ENVR 2515	Sustainable Development	4
HIST 2211	The World Since 1945	4
INTL 4700	Senior Capstone Seminar in International Affairs	4
or ENVS 4997	Senior Thesis	

**Environmental Studies and International Affairs 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
ENGW 1111	4	ENVR 1200, 1200, or 1110	4	Vacation	0	Vacation	0
ENVR 1101	4	PHIL 1180	4				
INTL 1101	4	POLS 1160	4				
SOCL 1246	4	Foreign language course	4				
		16			16	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 regional analysis course 1	4	INAF global dynamics course 1	4				

		INAF regional analysis course 2	4				
	16		17		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	International experiential learning	16	Elective	4	Co-op	0
				Quantitative methods course	4-5		
	0		16		8-9		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	ECON 3423	4	INAF global dynamics course 2	4	Co-op	0
		ENGW 3308 or 3315	4	Elective	4		
		ENVR 5210	4				
		INTL 3400	4				
	0		16		8		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op	0	INTL 4700 or ENVS 4997	4				
		ENVR 2515	4				
		ENVR undergraduate elective	4				
		INAF global dynamics course 3	4				
	0		16				

Total Hours: 129-130

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### 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
<b>Social Science Component</b>		
ECON 3423	Environmental Economics	4
POLS 2395	Environmental Politics and Policy	4
INTL 2240	Global Population and Development	4
SOCL 1246	Environment and Society	4
<b>Science Component</b>		
<i>Global Climate Change</i>		
ENVR 1110	Global Climate Change	4
<i>Earth and Environmental Sciences</i>		
ENVR 1200 or ENVR 2200	Dynamic Earth Earth's Changing Cycles	4
<i>Environment</i>		
ENVR 1101	Environmental Science	4
<i>Quantitative Methods</i>		
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	

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 1180	Environmental Ethics	4
PHIL 2325 or POLS 2325	Ancient Philosophy and Political Thought Ancient Philosophy and Political Thought	4
PHIL 2330	Modern Philosophy	4
<b>Philosophy of Science/Environment</b>		
Complete one of the following:		4
PHIL 1105	Science and Pseudoscience	
PHIL 2050	Information and Uncertainty	
PHIL 4510	Philosophy of Science	
PHIL 4555	Philosophy of Biology	

### Restricted Electives

Complete two of the following not used to fulfill another requirement with at least one course at the 4000 or 5000 level:

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	8
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete two additional PHIL courses. 8

**Integrative Courses**

Code	Title	Hours
ENVR 5210	Environmental Planning	4
ENVR 4997	Senior Thesis	4

**Environmental Studies and Philosophy Combined Major Credit Requirement**

Complete 72 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
ECON 1116	4	POLS 1150	4	Vacation		Vacation	
PHIL 1115	4	SOCL 1246	4				
INTL 2240	4	PHIL 2325 or POLS 2325	4				
PHIL 1180	4	Elective	4				
		16			16	0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1110	4	PHIL Restricted Elective	4	ENVR 1445	4	Co-op	
ENVR 1112 or 1200	4	ENVR 1101	4	MATH 2280	4		
PHIL 1105 or 4510	4	ENVR 3300 and ENVR 3301	5				

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 2330	4	POLS 2395	4				
		16			17	8	
Co-op		PHIL Elective	4	Vacation		Co-op	
			ENVR 5210	4			
			PHIL 4000/5000 Elective	4			
			ECON 3423	4			
		0			16	0	

  

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Elective	4	Elective	4	Co-op	
			Elective	4	Elective	4	
			Elective	4			
			Elective	4			
		0			16	8	

  

Year 5							
Fall	Hours	Spring	Hours				
Co-op		ENVR 4997	4				
			Elective	4			
			Elective	4			
			Elective	4			
		0			16	0	

Total Hours: 129

**Environmental Studies and Political Science, BA**

In this combined major, successful undergraduates will develop an awareness of the scientific, cultural, societal, and political aspects of the world's environmental problems through the lens of geopolitical decisions, public policy, and environmental regulations.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).



## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Environmental Studies Requirements

Code	Title	Hours
<b>Social Science Component</b>		
<i>Philosophy</i>		
PHIL 1180	Environmental Ethics	4
<i>Sociology</i>		
SOCL 1246	Environment and Society	4
<i>Economics</i>		
ECON 1116	Principles of Microeconomics	4
ECON 3423	Environmental Economics	4
<b>Science Component</b>		
Complete one course in each of the following four subject areas:		
<i>Biology</i>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<i>Earth and Environmental Sciences</i>		
Complete one of the following:		
ENVR 1112	Environmental Geology	4
ENVR 1200	Dynamic Earth	4
<i>Environment</i>		
ENVR 1101	Environmental Science	4
<i>Quantitative Methods</i>		
Complete one of the following:		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	4-5
MATH 2280	Statistics and Software	4-5

## Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		
POLS 2325	Ancient Philosophy and Political Thought	4
POLS 2328	Modern Political Thought	4
POLS 2330	American Political Thought	4
POLS 2332	Contemporary Political Thought	4
<b>Political Science Electives</b>		
Complete four POLS Electives 2000 level or above		16

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 648)
- Campaigns and Elections (p. 648)
- Comparative Politics (p. 649)
- Identity, Culture, and Politics (p. 649)
- International Relations and Diplomacy (p. 649)
- Law and Legal Studies (p. 649)
- Public Policy (p. 649)
- Security Studies (p. 649)

## Integrative Courses

Code	Title	Hours
<b>Integrative Courses</b>		
ENVR 5210	Environmental Planning	4
POLS 2395	Environmental Politics and Policy	4
<b>Capstone Requirement</b>		
Complete one of the following:		
ENVR 4900	Earth and Environmental Science Capstone	1-8
ENVR 4997	Senior Thesis	4
POLS 4701	Political Science Senior Capstone	4

## Environmental Studies and Political Science Combined Major Credit Requirement

Complete 80 semester hours in the major.

## Program Requirement

128 total semester hours required

## CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		
POLS 2350	State and Local Politics	4
POLS 3300	The U.S. Congress	4
POLS 3302	Judicial Process and Behavior	4
POLS 3307	Public Policy and Administration	4
POLS 3310	Public Opinion, Voting, and Elections	4
POLS 3160	Campaign Strategy	4
POLS 3162	Local Campaigns and Elections	4

## CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		
POLS 2345	Urban Policies and Politics	4
POLS 2350	State and Local Politics	4
POLS 2355	Intergovernmental Relations	4
POLS 3310	Public Opinion, Voting, and Elections	4
POLS 3162	Local Campaigns and Elections	4

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study  
Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	MATH 1215	4	Vacation	0	Vacation	0
ENVR 1101	4	PHIL 1180	4				
POLS 1150	4	POLS 1155	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, 1112, or 1200	4					Elective	4
POLS 1160	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 language course	4						
Political thought course	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3315 or 3308	4	Co-op	0	Co-op	0	Vacation	0
ENVR 5210	4						
POLS undergraduate elective	4						
Qualitative methods course	4-5						
	16-17		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
POLS 2395	4	Capstone or elective	1-4
Capstone or elective	1-4	EEMB 2302 and EEMB 2303	5
		Elective	4
POLS undergraduate elective	4	POLS undergraduate elective	4
POLS undergraduate elective	4		
	13-16		14-17

Total Hours: 123-130

**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	4	POLS 1155	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
ENVR 1104, 1112, or 1200	4	POLS 2400	4				
POLS 1160	4						
Foreign language course	4	Foreign language course	4				
		POLS undergraduate elective	4				
	16		16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Political thought course	4	Elective	4	Co-op	0
		EEMB 2302 and EEMB 2303 <sup>5</sup>	5	Elective	4		
		POLS undergraduate elective	4				
		Qualitative methods course	4-5				
	0		17-18		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315 or 3308	4	Elective	4	Co-op	0
		ENVR 5210	4	Elective	4		
		Capstone or elective	1-4				
		POLS undergraduate elective	4				
	0		13-16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	POLS 2395	4
		Capstone or elective	1-4
		Elective	4

POLS undergraduat elective	4
0	13-16

Total Hours: 123-130

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
ANTH 2305	Global Markets and Local Culture	4

#### Statistics

Complete one of the following:		4
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:

SOCL 3000 to SOCL 5999

### Environmental Studies Requirements

Code	Title	Hours
<b>Science Requirements</b>		
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
<b>Environmental Studies Elective A</b>		
Complete one of the 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:		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 2515	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 and Sustainability Sciences, BS

Our Bachelor of Science in Environmental and Sustainability Sciences is designed to provide students comprehensive and transdisciplinary skills needed to tackle the pressing environmental problems we face. Our core curriculum is grounded in a solid foundation in Earth systems, ecology, sustainable development, and required skills courses in data management and geographic information systems. Students then diverge into one of four concentrations. For students interested in the interface of social and ecological systems and who want to view environmental problem solving through a social science lens, we have a concentration in environment and society. For students interested in the nexus of food, water, and energy, our concentration in sustainable development and planning might be most appropriate. Is the conservation of organisms and their ecosystems the area you are most interested in? Our concentration in conservation, restoration, and management may be the best choice. Lastly, for students interested in understanding environmental problem solving from an Earth systems perspective,

courses in our Earth, oceans, and environmental change concentration will satisfy your curiosity. In the final semester, our students build teams that bring the skills developed across the varied concentrations back together to learn from each other and to work with our partners to solve specific environmental challenges presented by our stakeholders. Combined, this degree seeks to prepare students to work across a wide array of disciplines to help solve the environmental challenges of the future.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Environmental Science Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
<b>Core Curriculum</b>		
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	5
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	4
or ENVR 2200	Earth's Changing Cycles	
ENVR 2515	Sustainable Development	4
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
ENVR 4000	Science Communication and Professional Development	4
ENVR 4050	Solving Emerging Environmental Challenges through Capstone	4
or ENVR 4997	Senior Thesis	
or ENVR 4971	Junior/Senior Honors Project 2	
<b>Mathematics Requirements</b>		
MATH 1241	Calculus 1	4
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1341	Calculus 1 for Science and Engineering	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	4
or ECON 2350	Statistics	

or POLS 2400	Quantitative Techniques
or SOCL 2320	Statistical Analysis in Sociology

### ENVIRONMENTAL SCIENCE CONCENTRATIONS

Complete one of the following concentrations:

#### *Concentration in Environment and Society*

Code	Title	Hours
<b>Required Environment and Society Courses</b>		
SOCL 1246	Environment and Society	4
POLS 2395	Environmental Politics and Policy	4
SOCL 3485	Environment, Technology, and Society	4
ENVR 5450	Applied Social-Ecological Systems Modeling	4
PPUA 5260	Ecological Economics	4

#### **Environment and Society Electives**

Complete five of the following:		20-24
INTL 2464	Natural Resources and Sustainable Development	
EEMB 2420	Fisheries Biology, Policy, and Conservation	
ENVR 3150	Food Security and Sustainability	
EEMB 3460	Conservation Biology	
EEMB 3470	Coastal Ecology and Sustainability	
ENVR 5220	Ecosystem-Based Management	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	
PPUA 5264	Energy Democracy and Climate Resilience: Technology, Policy, and Social Change	
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure	
PPUA 5268	International Environmental Policy	
INTL 5100	Climate and Development	
ENVR 3201 and ENVR 3202	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia and Coastal Sustainability: The Blue Economy of the Gulf of Maine	
EEMB 4000 and ENVR 3151	Applied Conservation Biology and Food Sustainability in the Mediterranean - Abroad	

#### *Concentration in Sustainable Planning and Development*

Code	Title	Hours
<b>Required Sustainable Planning and Development Courses</b>		
ENVR 3200	Water Resources	4
ENVR 3150	Food Security and Sustainability	4
ENVR 5210	Environmental Planning	4
PPUA 5268	International Environmental Policy	4
ENVR 5350	Sustainable Energy and Climate Solutions	4

#### **Sustainable Planning and Development Electives**

Complete five of the following:		20-28
EEMB 2420	Fisheries Biology, Policy, and Conservation	

INTL 2464	Natural Resources and Sustainable Development
EEMB 3460	Conservation Biology
EEMB 3470	Coastal Ecology and Sustainability
EEMB 4001	Landscape and Restoration Ecology
ENVR 5563	Advanced Spatial Analysis
ENVR 5220	Ecosystem-Based Management
ENVR 5450	Applied Social-Ecological Systems Modeling
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500
PPUA 5260	Ecological Economics
ENVR 5190	Soil Science
CIVE 5275	Life Cycle Assessment of Materials, Products, and Infrastructure
ENVR 3201 and ENVR 3202	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia and Coastal Sustainability: The Blue Economy of the Gulf of Maine
EEMB 4000 and ENVR 3151	Applied Conservation Biology and Food Sustainability in the Mediterranean - Abroad

### **Concentration in Conservation, Restoration, and Management**

Code	Title	Hours
<b>Required Conservation, Restoration, and Management Courses</b>		

EEMB 2400	Introduction to Evolution	4
EEMB 3460	Conservation Biology	4
EEMB 3455 or CIVE 3430	Ecosystems Ecology	4
EEMB 4001	Landscape and Restoration Ecology	4
ENVR 5220	Ecosystem-Based Management	4

### **Conservation, Restoration, and Management Electives**

Complete five of the following:		20-25
EEMB 2420	Fisheries Biology, Policy, and Conservation	
EEMB 3466	Disease Ecology	
ENVR 3150	Food Security and Sustainability	
ENVR 3200	Water Resources	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 3475	Wildlife Ecology	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 5190	Soil Science	
EEMB 4000 and ENVR 3151	Applied Conservation Biology and Food Sustainability in the Mediterranean - Abroad	
ENVR 5350	Sustainable Energy and Climate Solutions	
ENVR 5450	Applied Social-Ecological Systems Modeling	
ENVR 5563	Advanced Spatial Analysis	

### **Concentration in Earth, Oceans, and Environmental Change**

Code	Title	Hours
<b>Earth Systems</b>		
Complete one of the following:		4-5
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 2200	Earth's Changing Cycles	
<b>Earth Materials and Landforms</b>		
Complete one of the following:		5
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
<b>Freshwater</b>		
Complete one of the following:		4-5
ENVR 3200	Water Resources	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
<b>Oceans</b>		
Complete one of the following:		4
ENVR 3600	Oceanography	
ENVR 3125	Global Oceanic Change	
<b>Environmental Change</b>		
Complete one of the following:		4
ENVR 3125	Global Oceanic Change	
ENVR 5150	Climate and Atmospheric Change	
<b>Chemistry</b>		
Complete one of the following:		5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
CHEM 1151 and CHEM 1152 and CHEM 1153	General Chemistry for Engineers and Lab for CHEM 1151 and Recitation for CHEM 1151	
<b>Physics</b>		
Complete one of the following:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
<b>Earth, Oceans, and Environmental Change Electives</b>		
Complete three of the following:		12-15
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3418	Geophysics	



ENVR 3410	Environmental Geochemistry
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500
ENVR 3600	Oceanography
ENVR 5190	Soil Science
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
CIVE 5280	Remote Sensing of the Environment
CIVE 3435	Environmental Pollution Fate and Transport
ENVR 5201 and ENVR 5202	Geologic Field Seminar and Environmental Science Field Seminar Abroad

### Science Major Credit Requirement

Complete 81 semester hours in the major.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Four Years, One Co-op in Spring/Summer 1

Year 1					
Fall	Hours	Spring	Hours	Summer 2	Hours
ENVR 1000	1	MATH 1241	4	Elective	4
ENVR 1400 and ENVR 1401	5	ENVR 1200 and ENVR 1201	5	Elective	4
ENVR 1500 and ENVR 1501	5	EEMB 2302 and EEMB 2303	5		
ENGW 1111	4	ESS concentration core or elective 1	4		
Elective	4				
		19	18	8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESC 2000	1	Co-op	0	Co-op	0	Elective	4
ENVR 2515	4					Elective	4
ENVR 2500 and ENVR 2501	5						
ENVR 3300 and ENVR 3301	5						
ESS concentration core or elective 2	4						
		19	0	0			8

Year 3			
Fall	Hours	Spring	Hours
ENGW 3307	4	ESS concentration core or elective 6	4
ESS concentration core or elective 3	4	ESS concentration core or elective 7	4
ESS concentration core or elective 4	4	ESS concentration core or elective 8	4
ESS concentration core or elective 5	4	Elective	4
		16	16

Year 4			
Fall	Hours	Spring	Hours
ESS concentration core or elective 9	4	Elective	4
ESS concentration core or elective 10	4	Elective	4
Elective	4	ENVR 4000	4
Elective	4	ENVR 4050	4
		16	16

Total Hours: 136

#### Four Years, One Co-op in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 2	Hours
ENVR 1000	1	MATH 1241	4	Elective	4
ENVR 1400 and ENVR 1401	5	ENVR 1200 and ENVR 1201	5	Elective	4
ENVR 1500 and ENVR 1501	5	EEMB 2302 and EEMB 2303	5		
ENGW 1111	4	ESS concentration core or elective 1	4		
Elective	4				
		19	18	8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESC 2000	1	ESS concentration core or elective 3	4	Elective	4	Co-op	0
ENVR 2515	4	ESS concentration core or elective 4	4	Elective	4		

ENVR 2500 and ENVR 2501	5 ESS concentration core or elective 5	4		
ENVR 3300 and ENVR 3301	5 Elective	4		
ESS concentration core or elective 2	4			
	19	16	8	0

**Year 3**

Fall	Hours	Spring	Hours
Co-op	0	ESS concentration core or elective 6	4
		ESS concentration core or elective 7	4
		ESS concentration core or elective 8	4
		ENGW 3307	4
	0	16	

**Year 4**

Fall	Hours	Spring	Hours
ESS concentration core or elective 9	4	ENVR 4000	4
ESS concentration core or elective 10	4	ENVR 4050	4
Elective	4	Elective	4
Elective	4	Elective	4
	16	16	

Total Hours: 136

## Environmental 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 policy-based perspective should consider the BA in environmental studies (p. 637).)

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Environmental Science Major Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
<b>Geology Courses</b>		
ENVR 1101	Environmental Science	4
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	5
<b>Calculus 1</b>		
MATH 1241	Calculus 1	4
or MATH 1251	Calculus and Differential Equations for Biology 1	
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Calculus 2 or Biostatistics</b>		
Complete one of the following:		4-5
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
MATH 1242	Calculus 2	4
or MATH 1252	Calculus and Differential Equations for Biology 2	
or MATH 1342	Calculus 2 for Science and Engineering	
<b>General Chemistry 1</b>		
CHEM 1101 and CHEM 1102 and CHEM 1103	General Chemistry for Health Sciences and Lab for CHEM 1101 and Recitation for CHEM 1101	5
or CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	
<b>General Chemistry 2</b>		
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
<b>Organic Chemistry</b>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Physics 1</b>		
Complete one of the following:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	

PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
PHYS 1171 and PHYS 1172 and PHYS 1173	Physics 1 for Bioscience and Bioengineering and Lab for PHYS 1171 and Interactive Learning Seminar for PHYS 1171	

**Earth and Environmental Science Capstone**

ENVR 4900	Earth and Environmental Science Capstone	1-4
or ENVR 4997	Senior Thesis	

**Environmental Science Concentrations**

Complete one of the following concentrations:

**CONCENTRATION IN MARINE SCIENCES**

Code	Title	Hours
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*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 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	
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PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	
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PHYS 1175 and PHYS 1176 and PHYS 1177	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175	
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*Marine Science Elective Courses*

Complete six of the following: 20-25

BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	
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or BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
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or BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
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BIOL 5100	Biology Colloquium	
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EEMB 2400	Introduction to Evolution	
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EEMB 2420	Fisheries Biology, Policy, and Conservation	
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EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
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EEMB 3120	Physical Biology of Marine Organisms	
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ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
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ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
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ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242	
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*Marine Studies Consortium Courses (unrestricted)*

MARS 3210	Marine Mammals	
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MARS 3310	Water Resources Policy and Management	
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MARS 3325	Coastal Zone Management	
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MARS 3430	Biology of Whales	
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*Three Seas Restricted Courses*

EEMB 5504	Biology of Corals	
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EEMB 5506	Biology and Ecology of Fishes	
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EEMB 5508 and EEMB 5509	Marine Birds and Mammals and Lab for EEMB 5508	
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EEMB 5512	Tropical Terrestrial Ecology	
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EEMB 5516 and EEMB 5517	Oceanography and Lab for EEMB 5516	
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EEMB 5518	Ocean and Coastal Processes	
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EEMB 5520	Coral Reef Ecology	
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EEMB 5522 and EEMB 5523	Experimental Design Marine Ecology and Lab for EEMB 5522	
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EEMB 5528	Marine Conservation Biology	
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EEMB 5532	Physiological and Molecular Marine Ecology	
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EEMB 5534 and EEMB 5535	Marine Invertebrate Zoology and Botany and Lab for EEMB 5534	
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EEMB 5536	Ocean and Coastal Sustainability	
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EEMB 5589	Diving Research Methods	
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*SEA Semester restricted courses***CONCENTRATION IN CONSERVATION SCIENCE**

Code	Title	Hours
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*Required Conservation Science Courses*

BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
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or BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
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or BIOL 1115 and BIOL 1116	General Biology 1 for Engineers and Lab for BIOL 1115	
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BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
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EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
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EEMB 3460	Conservation Biology	4
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ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
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Complete one of the following: 3-4

ECON 3423	Environmental Economics	
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POLS 2395	Environmental Politics and Policy	
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SOCL 3485	Environment, Technology, and Society	
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*Conservation Science Electives*

Note: Additional upper-level electives (numbered 2000 and above) may also be acceptable with department adviser approval.

Complete three of the following: 12-15

BIOL 3401	Comparative Vertebrate Anatomy	
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BIOL 3403	Animal Behavior	
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BIOL 5499	Plant Biotechnology	
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CHEM 2313 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 5190	Soil Science
ENVR 5210	Environmental Planning
<i>Three Seas Restricted Courses</i>	
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 5520	Coral Reef Ecology

**CONCENTRATION IN GEOSCIENCES**

Code	Title	Hours
<i>Required Geoscience Courses</i>		
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	5
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	5
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
ENVR 5210	Environmental Planning	4
<i>Physics 2</i>		
Complete one of the following:		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 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	

PHYS 1175 and PHYS 1176 and PHYS 1177	Physics 2 for Bioscience and Bioengineering and Lab for PHYS 1175 and Interactive Learning Seminar for PHYS 1175
<i>Geoscience Concentration Electives</i>	
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 5190	Soil Science
ENVR 5201	Geologic Field Seminar
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
<i>Dialogue of Civilizations restricted courses</i>	
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							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5	CHEM 1214 and CHEM 1215 and CHEM 1216	5	Elective	4	Elective	4
ENVR 1000	1	ENGV 1111	4	Elective	4	Elective	4
ENVR 1101	4	ENVR 1200 and ENVR 1201	5				
MATH 1241	4	MATH 1242	4				
Elective	4						
		18	18	8	8		
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 and PHYS 1162 and PHYS 1163	5					Elective	4
Concentration course	4						
Elective	4						

Elective	4					
	18	0	0	8		
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CHEM 2311 and CHEM 1212	5	Co-op	0	Co-op	0	Elective
Concentration course	4					Elective
Concentration course	4					
Elective	4					
	17	0	0	8		

<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
ENGW 3303, 3307, or 3315	4	ENVR 4900 or 4997	1-4			
Concentration course	4	Concentration 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**

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
ENVR 1000	1	CHEM 1211 and CHEM 1212 and CHEM 1213	5	Elective	4	Elective
ENVR 1101	4	ENGW 1111	4	Elective	4	Elective
MATH 1241	4	ENVR 1200 and ENVR 1201	5			
PHYS 1161 and PHYS 1162 and PHYS 1163	5	MATH 1242	4			
Elective	4					
	18		18	8	8	

<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CHEM 1214 and CHEM 1215 and CHEM 1216	5	CHEM 2311 and CHEM 1212	5	Elective	4	Co-op
Concentration course	4	EESC 2000	1	Elective	4	
Elective	4	Concentration course	4			
Elective	4	Concentration course	4			

Elective	4					
	17	18	8	0		
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	ENGW 3303, 3307, or 3315	4	Elective	4	Co-op
		Concentration course	4	Elective	4	
		Elective	4			
		Elective	4			
	0	16	8	0		

<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op	0	ENVR 4900 or 4997	1-4			
		Concentration course	4			
		Elective	4			
		Elective	4			
	0	13-16				

Total Hours: 132-135

**Five Years, Three Co-ops in Spring/Summer 1**

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
ENVR 1000	1	CHEM 1211 and CHEM 1212 and CHEM 1213	5	Vacation	0	Vacation
ENVR 1101	4	ENGW 1111	4			
MATH 1241	4	ENVR 1200 and ENVR 1201	5			
PHYS 1161 and PHYS 1162 and PHYS 1163	5	MATH 1242	4			
Elective	4					
	18		18	0	0	

<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CHEM 1214 and CHEM 1215 and CHEM 1216	5	Co-op	0	Co-op	0	Elective
EESC 2000	1					Elective
Concentration course	4					
Elective	4					
Elective	4					
	18		0	0	8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311 and CHEM 2312	5	Co-op	0	Co-op	0	Elective	4
Concentration course	4					Elective	4
Elective	4						
Elective	4						
	17		0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3303, 3307, or 3315	4	Co-op	0	Co-op	0	Vacation	0
Concentration course	4						
Elective	4						
Elective	4						
	16		0		0		0

Year 5			
Fall	Hours	Spring	Hours
Concentration course	4	ENVR 4900 or 4997	1-4
Elective	4	Concentration course	4
Elective	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							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	CHEM 1211 and CHEM 1212 and CHEM 1213	5	Vacation	0	Vacation	0
ENVR 1101	4	ENGW 1111	4				
MATH 1241	4	ENVR 1200 and ENVR 1201	5				
PHYS 1161 and PHYS 1162 and 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 CHEM 1215 and CHEM 1216	5	CHEM 2311 and CHEM 2312	5	Vacation	0	Co-op	0

Concentration course	4	EESC 2000	1		
Elective	4	Concentration course	4		
Elective	4	Elective	4		
		Elective	4		
	17		18		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Concentration course	4	Elective	4	Co-op	0
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENVR 3303, 3307, or 3315	4	Elective	4	Co-op	0
		Concentration course	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

Year 5			
Fall	Hours	Spring	Hours
Co-op	0	ENVR 4900 or 4997	1-4
		Concentration course	4
		Elective	4
		Elective	4
	0		13-16

Total Hours: 132-135

## Environmental Science and Landscape Architecture, BS

The Department of Marine and Environmental Sciences and the program in Landscape Architecture provide an education in basic environmental science and landscape architecture-related disciplines. This combined major provides students an opportunity to obtain the fundamental scientific background and practical training to tackle environmental and landscape-related issues. The program seeks to prepare students for advanced studies or careers in fields of urban planning, urban design, sustainable development, environmental consulting and/or other fields focusing on the interactions among landscapes, the built environment, human societies, and overall climatic impacts.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.



### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Environmental Science Requirements

Code	Title	Hours
Environmental Science Required Courses		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
ENVR 2515	Sustainable Development	4
ENVR 3200	Water Resources	4
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
Complete one of the following:		4-5
ENVR 1101	Environmental Science	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	

### Environmental Science Electives

Code	Title	Hours
A total of four electives is required; complete at least one, and no more than two, from each of the following categories:		
Geological Sciences		
ENVR 2310	Earth Materials	
ENVR 3410	Environmental Geochemistry	
ENVR 5190	Soil Science	
Human-Coupled Systems		
ENVR 2340	Earth Landforms and Processes	
ENVR 5210	Environmental Planning	
EEMB 3460	Conservation Biology	
Biological Perspectives		
EEMB 4001	Landscape and Restoration Ecology	
ENVR 4505	Wetlands	

### Landscape Architecture Requirements

Code	Title	Hours
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
LARC 2130	Sustainable Urban Site Design	6
LARC 2230	Introduction to Sustainable Site Planning and Design	4
LARC 2330	Cities, Landscape, and Modern Culture	4
LARC 2340	Cities, Landscape, and Contemporary Culture	4
LARC 2430	Plants, People, and Landscape Change	4

### Landscape Architecture Electives

Code	Title	Hours
Complete three of the following:		
LARC 2240	Sustainable Site Construction and Detailing	12-14
LARC 2440	Planting Design	

LARC 3170	Landscape Planning and Urbanism Studio
ARCH 3370	Advanced Topics in Architectural History
ARCH 3450	Advanced Architectural Communication
LARC 5210	Landscape Ecology
LARC 5220	Sustainable Landscape Practices
LARC 5310	Urban Landscape Seminar
SUEN 6210	Implementation and Visualization for Urban Environments 1
SUEN 6220	Implementation and Visualization for Urban Environments 2

### Capstone/Integrative Course

Code	Title	Hours
Complete one of the following:		
ENVR 4997	Senior Thesis	4
LARC 5120	Comprehensive Design Studio	
LARC 5210	Landscape Ecology	

### Program Requirements

132 total semester hours required

### Plan of Study

#### Four-Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	ARCH 1110	4	Elective	4	Elective	4
ENVR 1101 or 1200	4-5	ARCH 1120	6	Elective	4	Elective	4
LARC 2430	4	EEMB 2302 and EEMB 2303	5				
Elective	4	ENGW 1111	4				
Elective	4	EEAM 2000	1				
		17-18		20		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LARC 2130	6	LARC 2340	4	Elective	4	Co-op	0
LARC 2230	4	ENVR 3300 and ENVR 3301	5	Elective	4		
LARC 2330	4	LARC elective	4				
ENVR 3200	4	Elective	4				
		18		17		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENVR elective	4	ENGW 3314	4	Co-op	0
		ENVR elective	4	Elective	4		
		ENVR elective	4				

	LARC elective	4		
		0	16	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
Co-op	0	ENVR 2515	4	
		Capstone	4	
		ENVR elective	4	
		LARC elective	4	
	0		16	

Total Hours: 136-137

### Five-Years, Two Co-ops

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
ENVR 1101 or 1200	4-5	ARCH 1110	4	Vacation	0	Vacation
ENVR 1000	1	ARCH 1120	6			
LARC 2430	4	EEMB 2302 and EEMB 2303	5			
Elective	4	ENGW 1111	4			
Elective	4	EEAM 2000	1			
	17-18		20	0		0

<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
LARC 2130	6	LARC 2340	4	Vacation	0	Vacation
LARC 2230	4	LARC elective	4			
LARC 2330	4	Elective	4			
Elective	4	Elective	4			
	18		16	0		0

<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
ENVR 3300 and ENVR 3301	5	Co-op 1		Co-op 1	0	Vacation
ENVR 3200	4					
ENGW 3314	4					
Elective	4					
	17		0	0		0

<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
LARC elective	4	Co-op 2		Co-op 2	0	Vacation
ENVR 2515	4					
ENVR elective	4					
Elective	4					
	16		0	0		0

<b>Year 5</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ENVR elective	4	Capstone	4
ENVR elective	4	ENVR elective	4
Elective	4	LARC elective	4
Elective	4	Elective	4
	16		16

Total Hours: 136-137

### 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

Due to overlap in course content, double majoring in Ecology and Evolutionary Biology and Marine Biology is not permitted.

## Ecology and Evolutionary Biology Major Requirements

Code	Title	Hours
<b>Ecology and Evolutionary Biology</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
<b>Ecology and Evolutionary Genomics</b>		
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Evolution</b>		
EEMB 2400	Introduction to Evolution	4
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<b>Conservation</b>		
EEMB 3460	Conservation Biology	4
<b>Data Skills</b>		
ENVR 1500	Introduction to Environmental, Social, and Biological Data	4
<b>Biostatistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Communication</b>		
ENVR 4000	Science Communication and Professional Development	4
<b>Capstone</b>		
ENVR 4997 or ENVR 4900	Senior Thesis Earth and Environmental Science Capstone	4

## Supporting Courses

Code	Title	Hours
<b>Math</b>		
Complete one of the following:		4
MATH 1241	Calculus 1	
	or MATH 1251	Calculus and Differential Equations for Biology 1
<b>Chemistry</b>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<b>Organic or Environmental Chemistry</b>		
Complete one of the following:		4-5

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311
ENVR 3410	Environmental Geochemistry

### Physics 1

Complete one of the following: 5

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161

## Ecology and Evolutionary Biology Topical Requirement

Complete six of the following. At least one course must be taken from each list: 24

<i>Evolution of Organisms</i>		
EEMB 2290	Ecology and Evolution of Behavior	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2618	Vertebrate Zoology	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3120	Physical Biology of Marine Organisms	
EEMB 3450	Physiological Adaptations to the Environment	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 5534 and EEMB 5535	Marine Invertebrate Zoology and Botany and Lab for EEMB 5534	
MARS 3210	Marine Mammals	
MARS 3430	Biology of Whales	
MARS 3425	Biology of Fishes	
<i>Ecology and Conservation Biology</i>		
EEMB 3455	Ecosystems Ecology	
EEMB 2420	Fisheries Biology, Policy, and Conservation	
EEMB 3470 and EEMB 3471	Coastal Ecology and Sustainability and Lab for EEMB 3470	
EEMB 3475	Wildlife Ecology	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	
MARS 3315	Wetlands: Ecology and Hydrology	
ENVR 5242	Ancient Marine Life	
EEMB 3466	Disease Ecology	
EEMB 4000	Applied Conservation Biology	
<i>Analytical Skills</i>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
ENVR 5563	Advanced Spatial Analysis	
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
ENVR 3410	Environmental Geochemistry
EEMB 3555	Networks and Natural Systems
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611
PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147

### Ecology and Evolutionary Biology Credit Requirement

Complete 88 semester hours in the major.

### Ecology and Evolutionary Biology GPA Requirement

Complete all major courses with a cumulative GPA of 2.000.

### Program Requirement

137 total semester hours required

### Plan of Study

#### Five Year, Three Spring Co-ops

##### Year 1

Fall	Hours	Spring	Hours
EEMB 1101 and EEMB 1102	5	EEMB 1105 and EEMB 1106	5
ENVR 1000	1	PHYS 1145 and PHYS 1146	5
MATH 1241 or 1251	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
ENVR 1500 and ENVR 1501	5	Elective	4
Elective	4		
19		19	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500 and ENVR 2501	5	COOP 3945	0	COOP 3945	0	Elective	4
CHEM 2311 or ENVR 3410	4					Elective	4
EESC 2000	1						
BIOL 2301 and BIOL 2302	5						
Elective	4						
19		0		0		8	

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEMB 2400	4	COOP 3945	0	COOP 3945	0	Elective	4
EEMB 2302 and EEMB 2303	5					Elective	4

EEB Elective #1	4			
Elective	4			
17		0		8

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours
EEB Elective #2	4	COOP 3945	0	COOP 3945	0
EEB Elective #3	4				
EEMB 3460	4				
Elective	4				
16		0		0	

##### Year 5

Fall	Hours	Spring	Hours
EEB Elective #4	4	EEB Elective #6	4
EEB Elective #5	4	Elective	4
Elective	4	Elective	4
Experiential Credit (Capstone/ Thesis)	4	ENVR 4000	4
16		16	

Total Hours: 138

#### Five Year, Three Fall Co-ops

##### Year 1

Fall	Hours	Spring	Hours
EEMB 1101 and EEMB 1102	5	EEMB 1105 and EEMB 1106	5
ENVR 1000	1	PHYS 1145 and PHYS 1146	5
MATH 1241 or 1251	4	Elective	4
Elective	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
ENVR 1500 and ENVR 1501	5		
19		19	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 2500 and ENVR 2501	5	EEMB 2400	4	Elective	4	COOP 3945	0
BIOL 2301 and BIOL 2302	5	EEMB 2302 and EEMB 2303	5	Elective	4		
EESC 2000	1	EEB Elective #1	4				

CHEM 2311 and CHEM 2312	5 Elective	4		
Elective	4			
	20	17	8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 2	Hours
COOP 3945	0	EEB Elective #2	4	COOP 3945	0
		EEB Elective #3	4		
		EEMB 3460	4		
		Elective	4		
	0		16		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COOP 3945	0	EEB Elective #4	4	Elective	4	COOP 3945	0
		EEB Elective #5	4	Elective	4		
		Elective	4				
		Experiential Credit (Capstone/Thesis)	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
COOP 3945	0	EEB Elective #6	4
		Elective	4
		Elective	4
		ENVR 4000	4
	0		16

Total Hours: 139

## Marine Biology, BS

Our Bachelor of Science in Marine Biology aims to provide students with a solid foundation in marine biology, with flexibility to explore ocean and coastal processes, marine biogeochemistry, the ecology and evolution of marine organisms, and the ocean's role and responses in global change. Core, skills-based courses are designed to prepare students for in-depth examination of the contemporary issues facing marine organisms and ecosystems, while helping to develop resumés that are strengthened by experiential learning. This major also provides options for students following a prevet or premed track.

Faculty teaching the courses are experts who are dedicated to marine research and experiential learning, providing students the opportunities to learn new, valuable skills and to expand their professional science network. Students may actively participate in field and lab work, internships at Northeastern University's Marine Science Center in Nahant, MA, study abroad through Dialogue of Civilizations programs or the long-standing Three Seas Program (see below). Additional opportunities exist for students in this strong, interdisciplinary program that prepares

students for direct entry into the job market or a competitive graduate program.

**Three Seas Program**

The Three Seas Program, now in its 38<sup>th</sup> year, delivers a unique combination of inquiry-based, global study, fieldwork, and research across three distinct locations: the Gulf of Maine, tropical coastal Panama, and the Pacific Northwest. This optional, two-semester program is designed to teach students to plan and execute marine field research to enhance their future opportunities, whether in top doctoral programs or careers with government agencies or private consulting firms. Students finish the program as active scientists who are certified in scientific diving, have an expanded skill set, and a robust professional network.

For more information, please see the Three Seas Program website (<https://cos.northeastern.edu/marine-environmental-sciences/three-seas/>).

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Marine Biology Major Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
ENVR 1000	Marine and Environmental Sciences at Northeastern	1
<b>Foundations Courses</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<b>Evolution</b>		
EEMB 2400	Introduction to Evolution	4
<b>Marine Biology</b>		
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	5
<b>Conservation</b>		
EEMB 3460	Conservation Biology	4
<b>Scientific Communication</b>		

ENVR 4000	Science Communication and Professional Development	4
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**Capstone**

Complete one of the following: 1-4

BIOL 4701	Biology Capstone	
ENVR 4900	Earth and Environmental Science Capstone	
ENVR 4997	Senior Thesis	

**MARINE BIOLOGY OPTIONS****Requirements for Students Not Participating in Three Seas**

Code	Title	Hours
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ENVR 3125	Global Oceanic Change	4
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ENVR 3600	Oceanography	4
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Complete four of the following: 16-20

BIOL 5587	Comparative Neurobiology	
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EEMB 2290	Ecology and Evolution of Behavior	
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EEMB 2420	Fisheries Biology, Policy, and Conservation	
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EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
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EEMB 3120	Physical Biology of Marine Organisms	
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EEMB 3450	Physiological Adaptations to the Environment	
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EEMB 3465	Ecological and Conservation Genomics	
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EEMB 5130 and EEMB 5131	Ecological Dynamics and Lab for EEMB 5130	
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ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
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ENVR 4504	Environmental Pollution	
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ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242	
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EEMB 3455	Ecosystems Ecology	
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EEMB 3466	Disease Ecology	
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EEMB 3470	Coastal Ecology and Sustainability	
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EEMB 3555	Networks and Natural Systems	
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Elective courses available at Nahant campus:

EEMB 5534 and EEMB 5535	Marine Invertebrate Zoology and Botany and Lab for EEMB 5534	
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EEMB 5522 and EEMB 5535	Experimental Design Marine Ecology and Lab for EEMB 5534	
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EEMB 5536	Ocean and Coastal Sustainability	
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Elective courses available through the Marine Consortium (location varies):

MARS 3430	Biology of Whales	
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MARS 3210	Marine Mammals	
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MARS 3425	Biology of Fishes	
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**Three Seas Students**

Code	Title	Hours
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Three Seas courses at Nahant campus:

EEMB 5516 and EEMB 5517	Oceanography and Lab for EEMB 5516	5
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EEMB 5522 and EEMB 5523	Experimental Design Marine Ecology and Lab for EEMB 5522	5
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EEMB 5534 and EEMB 5535	Marine Invertebrate Zoology and Botany and Lab for EEMB 5534	5
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EEMB 5536	Ocean and Coastal Sustainability	3
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EEMB 5589	Diving Research Methods	2
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Three Seas courses (abroad):

EEMB 5504	Biology of Corals	3
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EEMB 5506	Biology and Ecology of Fishes	3
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EEMB 5508 and EEMB 5509	Marine Birds and Mammals and Lab for EEMB 5508	3
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EEMB 5512	Tropical Terrestrial Ecology	1
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EEMB 5518	Ocean and Coastal Processes	2
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EEMB 5520	Coral Reef Ecology	2
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EEMB 5528	Marine Conservation Biology	3
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EEMB 5532	Physiological and Molecular Marine Ecology	3
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**Supporting Courses for Marine Biology**

Code	Title	Hours
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**Mathematics**

MATH 1251	Calculus and Differential Equations for Biology 1	4
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or MATH 1241	Calculus 1	
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or MATH 1341	Calculus 1 for Science and Engineering	
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**Introduction to Data**

ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	5
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**Biostatistics**

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
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**Chemistry**

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	4
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or ENVR 3410	Environmental Geochemistry	
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**Physics**

Complete a lecture/lab set for Physics 1:

<i>Physics 1</i>		5
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PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145 (recommended)	
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PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
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PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
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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	
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**Marine Biology Major Credit/GPA Requirements**

Complete 89 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**

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
ENVR 1000	1	EEMB 1105 and EEMB 1106	5	Elective	4	Elective	4
EEMB 1101 and EEMB 1102	5	CHEM 1161 and CHEM 1162 and CHEM 1163	5	Elective	4	Elective	4
ENVR 1500 and ENVR 1501	5	PHYS 1161 and PHYS 1162 and PHYS 1163	5				
MATH 1251	4	Elective	4				
Elective	4						
	19		19		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2301 and BIOL 2302	5	Co-op	0	Co-op	0	Elective	4
EESC 2000	1					Elective	4
ENVR 2500 and ENVR 2501	5						
CHEM 2311 and CHEM 2312	5						
ENGW 3307	4						
	20		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEMB 2302 and EEMB 2303	5	Co-op	0	Co-op	0	Elective	4
EEMB 2700 and EEMB 2701	5					Elective	4
EEMB 2400	4						
Marine biology elective	4						
	18		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Marine biology elective	4	BIOL 4701, ENVR 4900, or ENVR 4997	1-4
EEMB 3460	4	Marine biology elective	4
ENVR 3600 (Oceanography)	4	ENVR 3125	4
Marine biology elective	4	ENVR 4000	4
	16		13-16

Total Hours: 137-140

Marine Biology—Three Seas Program,

**Four Years, One Co-op in Spring/Summer 1****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000	1	EEMB 1105 and EEMB 1106	5	Vacation	0	Elective	4
MATH 1251	4	CHEM 1161 and CHEM 1162	5			Elective	4
Elective	4	PHYS 1161 and PHYS 1162 and PHYS 1163	5				
EEMB 1101 and EEMB 1102	5	EEMB 2400	4				
ENVR 1500 and ENVR 1501	5						
	19		19		0		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BIOL 2301 and BIOL 2302	5	Co-op	0	Co-op	0	Elective	4
EESC 2000	1						
ENVR 2500 and ENVR 2501	5						
CHEM 2311 and CHEM 2312	5						
ENGW 3307	4						
	20		0		0		4

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	EEMB 5516 and EEMB 5517	5	Vacation	0	Vacation	0

EEMB 2700 and EEMB 2701	5 EEMB 5522 and EEMB 5523	5		
EEMB 2302 and EEMB 2303	5 EEMB 5534 and EEMB 5535	5		
EEMB 3460	4 EEMB 5536	3		
	EEMB 5589	2		
	18	20	0	0

**Year 4**

Fall	Hours	Spring	Hours
EEMB 5504	3	BIOL 4701, ENVR 4900, or ENVR 4997	1-4
EEMB 5506	3	Elective	4
EEMB 5508 and EEMB 5509	3	ENVR 4000	4
EEMB 5512	1	Elective	4
EEMB 5518	2		
EEMB 5520	2		
EEMB 5528	3		
EEMB 5532	3		
	20	13-16	

Total Hours: 141-144

## 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. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Environmental Science Courses**

Code	Title	Hours
<b>Environmental Science Required Courses</b>		
ENVR 1101	Environmental Science	4
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	5
ENVR 5210	Environmental Planning	4
ENVR 4900	Earth and Environmental Science Capstone	1
or ENVR 4997	Senior Thesis	

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 2340  
and ENVR 2341

Earth Landforms and Processes  
and Lab for ENVR 2340

ENVR 4504

Environmental Pollution

ENVR 5190	Soil Science
ENVR 5201	Geologic Field Seminar
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
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
MATH 1252	Calculus and Differential Equations for Biology 2	4
or MATH 1342	Calculus 2 for Science and Engineering	
MATH 3081	Probability and Statistics	4
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, DS, CY and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

138 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
ENVR 1101	4	CS 2510 and CS 2511	5	CS 3500	4	Vacation
CS 1200	1	ENVR 1203 or 2311	1	Elective	4	
CS 1800 and CS 1802	5	CS 3200	4			
CS 2500 and CS 2501	5	Elective	4			
ENGW 1111	4	ENVR 1200	4			
		19			18	8
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENVR 5210	4	CHEM 1214 and CHEM 1215 and CHEM 1216	5	MATH 1252 or 1342	4	Co-op
CHEM 1211 and CHEM 1212 and CHEM 1213	5	MATH 1251 or 1341	4	Elective	4	
CS 3000	4	ENVR elective	4			
		19			18	8

ENVR 1202	4	Khoury elective	4			
		CS 1210	1			
		17	18	8	0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	MATH 3081	4	Co-op	
		ENVR elective	4	ENGW 3302	4		
		ENVR elective	4				
		ENVR integrative (take lab if offered)	4				
		THTR 1170	1				
		0	17	8	0	0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		CS 4500	4	Elective	4
		ENVR 4900 (or ENVR 4997 (if short of credit hours))	1	Elective	4
		ENVR integrative	4		
		ENVR elective	4		
		Computing and social issues	4		
		0	17	8	

Total Hours: 138

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	Elective	4				
ENGW 1111	4	ENVR 1202 or 2310	4				
ENVR 1101	4	ENVR 1203 or 2311	1				
		19	18	0	0	0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CHEM 1214 and CHEM 1215 and CHEM 1216	5	Vacation	0	Co-op	0

CHEM 1211 and CHEM 1212 and CHEM 1213	5	CS 3000	4			
ENVR 5210	4	ENVR elective	4			
ENVR 1200	4	CS 1210	1			
		Khoury elective	4			
		17	18	0	0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MATH 1251 or 1341	4	MATH 3081	4	Co-op	0
		ENVR integrative (take lab if offered)	4	Elective	4		
		ENVR elective	4				
		THTR 1170	1				
		Elective	4				
		0	17	8	0	0	

**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	0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		CS 4500	4
		ENVR 4900 (ENVR 4997 (if short of credit hours))	1
		ENVR elective	4
		ENVR elective	4
		Computing and social issues	4
		0	17

Total Hours: 138

**Data Science and Environmental Science, BS**

The data 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 analysis of large amounts of data—an ideal fit with data science, where students study the collection, manipulation,

storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Data Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

### Environmental Science Courses

Code	Title	Hours
<b>Environmental Science Required Courses</b>		
ENVR 1101	Environmental Science	4
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	5
ENVR 5210	Environmental Planning	4
ENVR 4900	Earth and Environmental Science Capstone	1
or ENVR 4997	Senior Thesis	
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	
<b>Environmental Science Integrative Courses</b>		
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	
<b>Environmental Science Electives</b>		
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
EEMB 3465	Ecological and Conservation Genomics	
EEMB 4000	Applied Conservation Biology	
ENVR 1110	Global Climate Change	
ENVR 2310	Earth Materials	
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 3151	Food Sustainability in the Mediterranean - Abroad	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
ENVR 4504	Environmental Pollution	
ENVR 5190	Soil Science	
ENVR 5201	Geologic Field Seminar	
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	
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing / First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
DS 4900	Data Science Senior Project	4

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

138 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
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation
CS 1800 and CS 1802	5	ENVR 1101	4	CS 3200	4	
CS 2500 and CS 2501	5	ENVR 1202 and ENVR 1203	5			
ENVR 1200 (ENVR 1201 (lab if offered))	4	ENVR 2500 and ENVR 2501	5			
ENGW 1111	4					
		19		19		8
<hr/>						
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENVR 5210	4	CHEM 1214 and CHEM 1215 and CHEM 1216	5	MATH 1341 or 1251	4	Co-op
CHEM 1211 and CHEM 1212 and CHEM 1213	5	MATH 1251 or 1341	4	Elective	4	
DS 3000	4	DS 4200	4			
ENVR elective	4	DS 4300	4			
		CS 1210	1			
		17		18		8
<hr/>						
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		ENVR elective	4	ENGW 3302	4	Co-op
		Khoury elective	4	Elective	4	
		ENVR elective	4			
		ENVR integrative (take lab if offered)	4			
		THTR 1170	1			
		0		17		8
<hr/>						



**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		ENVR 4900 (or ENVR 4997 (if short of credit hours))	1	Elective	4
		DS 4400	4	Elective	4
		DS 4900	4		
		ENVR integrative	4		
		ENVR elective	4		
	0		17		8

Total Hours: 139

**Five Years, Three Co-ops in Summer 2/Fall****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	ENVR 1101	4				
ENVR 1200 (ENVR 1201 (if offered))	4	ENVR 1202 and ENVR 1203	5				
ENGW 1111	4						
	19		18		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CHEM 1214 and CHEM 1215 and CHEM 1216	5	Vacation	0	Co-op	0
CHEM 1211 and CHEM 1212 and CHEM 1213	5	DS 3000	4				
ENVR 5210	4	ENVR elective	4				
ENVR 2500 and ENVR 2501	5	CS 1210	1				
		Elective	4				
	18		18		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MATH 1251 or 1341	4	Elective	4	Co-op	0
		ENVR integrative (take lab if offered)	4	Elective	4		

ENVR  
elective 4

THTR 1170 1

Khoury  
elective 4

0 17 8 0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4200	4	Elective	4	Co-op	0
		DS 4300	4	ENGW 3302	4		
		ENVR integrative	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ENVR 4900 (ENVR 4997 (if short of credit hours))	1
		DS 4400	4
		DS 4900	4
		ENVR elective	4
		ENVR elective	4
	0		17

Total Hours: 139

**Data Science and Ecology and Evolutionary Biology, BS**

The combined major in data science and ecology and evolutionary biology provides a strong foundation in the fundamentals of ecology and evolutionary biology, including focal points in population, community, and ecosystem ecology; evolutionary ecology and biology; conservation biology; population genetics; behavior; and ecological and evolutionary genomics. Data science allows students to study the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The interdisciplinary nature of the major fosters critical thinking and creativity in scientific problem solving.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Data Science Course Work**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**Ecology and Evolutionary Biology Course Work**

Code	Title	Hours
<b>Ecology and Evolutionary Biology</b>		
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
<b>Ecology and Evolutionary Genomics</b>		
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5
<b>Genetics</b>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<b>Evolution</b>		
EEMB 2400	Introduction to Evolution	4
<b>Ecology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5

**Capstone**

ENVR 4997	Senior Thesis	4
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**Ecology and Evolutionary Biology Topical Requirement**

Code	Title	Hours
Complete 16 credits of the following. At least one course must be taken from each list.		16

*Evolution of Organisms*

EEMB 2290	Ecology and Evolution of Behavior	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3450	Physiological Adaptations to the Environment	
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 and EEMB 3471	Coastal Ecology and Sustainability and Lab for EEMB 3470	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	
MARS 3315	Wetlands: Ecology and Hydrology	

*Analytical Skills*

ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3465	Ecological and Conservation Genomics	

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212 and CHEM 1213	General Chemistry 1 and Lab for CHEM 1211 and Recitation for CHEM 1211	5
<b>Physics</b>		
Complete one of the following:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
DS 4900	Data Science Senior Project	4

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS,CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

136 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	ENVR 2500 and ENVR 2501	5	Physics requirement	5		

CS 2500 and CS 2501	5	EEMB 1105 and EEMB 1106	5				
ENGW 1111	4	CS 3200	4				
EEMB 1101 and EEMB 1102	5						
		20	19	9			0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1211 and CHEM 1212 and CHEM 1213	5	MATH 1251 or 1341	4	Elective	4	Co-op	
BIOL 2301 and BIOL 2302	5	DS 4200	4	Elective	4		
DS 3000	4	DS 4300	4				
EEB topical requirement	4	CS 1210	1				
		Elective	4				
		18	17	8			0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		EEMB 2400	4	ENGW 3302	4	Co-op	
		EEB topical requirement	4	Khoury elective	4		
		EEB topical requirement	4				
		EEMB 2302 and EEMB 2303	5				
		THTR 1170	1				
		0	18	8			0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Elective	4		
		DS 4900	4				
		ENVR 4997	4				
		EEB topical requirement	4				
		0	16	4			

Total Hours: 137

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	EEMB 1105 and EEMB 1106	5				
ENGW 1111	4	MATH 1251 or 1341	4				

EEMB 1101 and EEMB 1102	5					
	20	18	0	0		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation	0	Co-op	0
CHEM 1211 and CHEM 1212 and CHEM 1213	5	EEB topical requirement	4				
ENVR 2500 and ENVR 2501	5	CS 1210	1				
BIOL 2301 and BIOL 2302	5	Physics requirement	5				
	19		14		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4200	4	Elective	4	Co-op	0
		EEB topical requirement	4	Elective	4		
		EEMB 2400	4				
		THTR 1170	1				
		Khoury elective	4				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	DS 4300	4	Elective	4	Co-op	0
		DS 4400	4	ENGW 3302	4		
		EEMB 2302 and EEMB 2303	5				
		Elective	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ENVR 4997	4
		DS 4900	4
		EEB topical requirement	4
		EEB topical requirement	4
	0		16

Total Hours: 137

## Environmental Science and Chemistry, BS

The Departments of Marine and Environmental Sciences and Chemistry provide education in basic environmental science and chemistry-related disciplines. The overall objective of this combined major is to provide the fundamental scientific background and practical training for students as they prepare for environmental and chemically related careers or advanced study in fields including the traditional

specialties such as toxicology, pollution, 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

### Environmental Science Major Requirements

Code	Title	Hours
<b>Earth Foundations</b>		
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
<b>Geomorphology</b>		
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	5
<b>Environmental Geology Intermediate/Advanced Electives</b>		
Complete two intermediate or advanced electives from ENVR 2300 to ENVR 5999.		8-10

### Supporting Courses for Environmental Science

Code	Title	Hours
<b>Mathematics</b>		
MATH 1241	Calculus 1	4
MATH 1242	Calculus 2	4
<b>Science Requirement</b>		
Complete one of the following options:		10
<i>Biology Option</i>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	
<i>Physics Option</i>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

PHYS 1165 Physics 2  
and PHYS 1166 and Lab for PHYS 1165

## Chemistry Major Requirements

Code	Title	Hours
<b>General Chemistry</b>		
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
<b>Intermediate-Level Chemistry</b>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
CHEM 2331 and CHEM 2332	Bioanalytical Chemistry and Lab for CHEM 2331	5
CHEM 3403 and CHEM 3404	Quantum Chemistry and Spectroscopy and Lab for CHEM 3403	5
CHEM 3431 and CHEM 3432	Physical Chemistry and Lab for CHEM 3431	5
<b>Advanced-Level Chemistry</b>		
CHEM 3521 and CHEM 3522	Instrumental Methods of Analysis and Instrumental Methods of Analysis Lab	5

## Environmental Science/Chemistry Integrative Requirement

Code	Title	Hours
Choose two courses from the following:		
ENVR 3410	Environmental Geochemistry	
ENVR 5190	Soil Science	

## Environmental Science/Chemistry Major Credit Requirement

Complete 94 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
CHEM 1211 and CHEM 1212 and CHEM 1213	5	CHEM 1214 and CHEM 1215 and CHEM 1216	5	Vacation	0	Vacation	0
ENGW 1111	4	ENVR 1202 and ENVR 1203	5				
ENVR 1200 and ENVR 1201	5	MATH 1242	4				
MATH 1241	4	Elective	4				
	18		18		0		0

Year 2							
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 and ENVR 2311	5	EESC 2000	1				
Physics 1 or Biology 1	5	GEOL intermediate/ advanced undergraduate elective	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 and CHEM 2332	5	Elective	4	Co-op	0
		ENVR 2340 and 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 and CHEM 3522	5	Co-op	0
		CHEM 3432	1	Elective	4		
		Elective	4				
		GEOL intermediate/ advanced undergraduate elective	4				
		Integrative course	4				
	0		17		9		0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ENGW 3303, 3307, or 3315	4				
		CHEM 3403	4				
		CHEM 3404	1				
		Elective	4				
		Elective	4				
	0		17				

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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### 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
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3423	Environmental Economics	4

#### Economics Electives

Complete 2 Economics elective courses found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range. ECON 3423 cannot count as an Economics Elective:

ECON 1200 to ECON 1999	7-8
ECON 3000 to ECON 4689	
ECON 4900 to ECON 4999	
ECON 5200 to ECON 5999	

### Environmental Studies Requirements

Code	Title	Hours
<b>Social Science Component</b>		
PHIL 1180	Environmental Ethics	4
POLS 1150 and POLS 1151	American Government and Recitation for POLS 1150	4
POLS 2395	Environmental Politics and Policy	4
SOCL 1246	Environment and Society	4
<b>Science Component</b>		
ENVR 1101	Environmental Science	4
ENVR 1112 or ENVR 1200	Environmental Geology Dynamic Earth	4
ENVR 1450	Introduction to Sustainability Science	4
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5

#### GPA Requirement

Students are required to earn a GPA of 2.000 in either PHIL 1180 or PHIL 3480 and in ENVR 1101.

#### Environmental Science Elective

Complete one environmental science elective in consultation with the environmental studies head adviser.

### Integrative Requirements

Code	Title	Hours
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3308	Advanced Writing in the Social Sciences	

#### Integrative Course

Note: Your integrative course and your capstone course (below) must be from different departments.

Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
ENVR 5210	Environmental Planning	

#### Capstone

Note: Your integrative course (above) and your capstone course must be from different departments.

ECON 4692 or ENVR 4997 or ENVS 4997	Senior Economics Seminar Senior Thesis Senior Thesis	4
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### Experiential Learning Requirement

Code	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 GPA/Credit Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):



Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 84 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000 or ECON 1000	1	CS 1100	4	ECON 2315	4	Elective	4
MATH 1231	4	ECON 1116	4	Elective	4	Elective	4
ECON 1115	4	SOCL 1246	4				
PHIL 1180	4	ENVR 1101	4				
POLS 1150	4						
POLS 1151	0						
		17	16	8	8		

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	ECON 2350	4	ECON 2560	4	Co-op	
POLS 2395	4	ENVR 1450	4	Elective	4		
ENVR 1112 or 1200	4	ECON elective 1	4				
ENVR elective	4	Elective	4				
		16	16	8	0		

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 3423	4	Elective	4	Co-op	
		ENVR 3300	4	Elective	4		
		ENVR 3301	1				
		ECON elective 2	4				
		ENGW 3307 or 3308	4				
		0	17	8	0		

#### Year 4

Fall	Hours	Spring	Hours
Co-op		ECON 4692 or ENVR 5210	4
		ENVS 4997, ENVR 4997, or ECON 4692	4
		Elective	4

Elective	4
0	16

Total Hours: 130

## Ecology and Evolutionary Biology, Minor

The ecology and evolutionary biology minor is designed to provide students a foundation in the principles of ecology and evolutionary biology, as well as to provide concrete skills that will help students achieve their career goals.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Restrictions

Minor not available for students who major in marine biology.

## Required Courses

Code	Title	Hours
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
EEMB 1105 and EEMB 1106	Foundations in Ecological and Evolutionary Genomics and Lab for EEMB 1105	5

## Elective Courses

Complete four courses from the lists below. At least one course needs to come from each list:

Code	Title	Hours
<b>Evolution of Organisms</b>		
EEMB 2400	Introduction to Evolution	4
EEMB 2290	Ecology and Evolution of Behavior	4
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	5
EEMB 3465	Ecological and Conservation Genomics	4
EEMB 4010	Biology of Mammals	4
<b>Ecology and Conservation Biology</b>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
EEMB 3460	Conservation Biology	4
EEMB 3475	Wildlife Ecology	4
EEMB 4001	Landscape and Restoration Ecology	4
EEMB 4000	Applied Conservation Biology	4
<b>Analytical Skills</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	5
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
EEMB 3465	Ecological and Conservation Genomics	4
EEMB 3555	Networks and Natural Systems	4
EEMB 5130	Ecological Dynamics	4

**GPA Requirement**

2.000 GPA required in the minor

**Environmental 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 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	
ENVR 1112	Environmental Geology	
ENVR 1200 and ENVR 1201	Dynamic Earth 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	
POLS 2395	Environmental Politics and Policy	

**GPA Requirement**

2.000 GPA required in the minor

**Environmental and Sustainability Sciences, Minor**

The environmental and sustainability sciences minor provides undergraduates with a strong foundation 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.

**Coursework**

Code	Title	Hours
<b>Foundational Classes</b>		
Complete two of the following:		8-9
ENVR 1200 and ENVR 1201 or ENVR 2200	Dynamic Earth and Lab for ENVR 1200 Earth's Changing Cycles	
ENVR 1400 and ENVR 1401	Foundations in Environmental and Sustainability Sciences and Lab for ENVR 1400	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
ENVR 2515	Sustainable Development	
<b>Advanced Coursework</b>		
Complete four courses from this list. At least three courses need to be at the 3000-level or above:		16-19
EEMB 1450	Introduction to Marine Biology	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 3460	Conservation Biology	
EEMB 3465	Ecological and Conservation Genomics	
EEMB 4001	Landscape and Restoration Ecology	
ENVR 1110	Global Climate Change	
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	
ENVR 2200	Earth's Changing Cycles	
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 3125	Global Oceanic Change	
ENVR 3150	Food Security and Sustainability	
ENVR 3151	Food Sustainability in the Mediterranean - Abroad	
ENVR 3200	Water Resources	
ENVR 3600	Oceanography	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	
POLS 2395	Environmental Politics and Policy	
PPUA 5260	Ecological Economics	
PPUA 5268	International Environmental Policy	
SOCL 3485	Environment, Technology, and Society	

**GPA Requirement**

2.000 GPA required in the minor

**Geosciences, Minor**

The geosciences minor is designed to provide students with a comprehensive understanding of the breadth of topics in the geosciences. Core foundational classes in Earth science are followed by student-directed electives across a range of course options.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
ENVR 1200 and ENVR 1201	Dynamic Earth and Lab for ENVR 1200	5
ENVR 2200	Earth's Changing Cycles	4
Complete one of the following:		5
ENVR 2310 and ENVR 2311	Earth Materials and Lab for ENVR 2310	
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	

**Geology Elective**

Code	Title	Hours
Complete three of the following:		12-14
ENVR 2340 and ENVR 2341	Earth Landforms and Processes and Lab for ENVR 2340	
ENVR 3125	Global Oceanic Change	
ENVR 3200	Water Resources	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
ENVR 3410	Environmental Geochemistry	
ENVR 3600	Oceanography	
ENVR 5150	Climate and Atmospheric Change	
ENVR 5190	Soil Science	
ENVR 5202	Environmental Science Field Seminar Abroad	
ENVR 5210	Environmental Planning	
ENVR 5350	Sustainable Energy and Climate Solutions	

**GPA Requirement**

2.000 GPA required in the minor

**Marine Sciences, Minor**

The marine science minor is designed to provide Northeastern undergraduates with a strong foundation in the marine sciences, while offering the opportunity to obtain concrete skills that will enhance employability. Our minor curriculum also offers the flexibility to take classes in the area of greatest interest to the student and provides hands-on training in foundation marine science courses.

**Minor Requirements****Required Courses**

Code	Title	Hours
EEMB 1101 and EEMB 1102	Foundations in Ecology and Evolutionary Biology and Lab for EEMB 1101	5
ENVR 3600 or ENVR 3125	Oceanography Global Oceanic Change	4

**Skills Course**

Code	Title	Hours
Complete one of the following:		4-5
ENVR 1500 and ENVR 1501	Introduction to Environmental, Social, and Biological Data and Lab for ENVR 1500	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
EEMB 3555	Networks and Natural Systems	

**Elective Courses**

Code	Title	Hours
Complete three of the following:		11-15
EEMB 2420	Fisheries Biology, Policy, and Conservation	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
ENVR 3125	Global Oceanic Change	
ENVR 3201	Coastal Sustainability: Ecology and Coupled Human-Natural Systems in Southeast Asia	
ENVR 3202	Coastal Sustainability: The Blue Economy of the Gulf of Maine	
EEMB 3450	Physiological Adaptations to the Environment	
ENVR 3600	Oceanography	
ENVR 5242 and ENVR 5243	Ancient Marine Life and Lab for ENVR 5242	
Courses offered in Nahant, MA:		
EEMB 5522 and EEMB 5523	Experimental Design Marine Ecology and Lab for EEMB 5522	
EEMB 5534 and EEMB 5535	Marine Invertebrate Zoology and Botany and Lab for EEMB 5534	
EEMB 5536	Ocean and Coastal Sustainability	

**GPA Requirement**

2.000 GPA required in the minor

**Mathematics**Website (<https://cos.northeastern.edu/mathematics/>)

**Egon Schulte, PhD**  
Professor and Chair

567 Lake Hall

617.373.2450  
617.373.5658 (fax)

Mathematics is of ever-increasing importance to our society and everyday life. It has long been the language of science and technology and provides a rich source of methods for analyzing and solving problems encountered in the physical world. Today, mathematics is essential in virtually all fields of human endeavor, including business, the arts, and the social sciences.

The Bachelor of Arts degree requires at least 11 mathematics courses and two physics courses, in addition to the study of a foreign language; this program is appropriate for students who wish a broader liberal arts education. The Bachelor of Science degree requires at least 14 mathematics courses and two physics courses but no foreign language study; it is more specialized, and it is recommended for those strongly interested in mathematics and science. The department also offers a minor degree in mathematics.

The major programs provide flexibility with elective courses. Students may take advantage of a range of interdisciplinary programs and may join a major in mathematics with one in such fields as computer science, physics, and biology.

Exceptional students are accepted into the Honors Program and have the option to enroll in honors sections of several of their mathematics courses. All math majors may benefit from co-op opportunities in the scientific and business communities in Boston and elsewhere.

Many of the mathematics courses that we offer use computers for visualization, modeling, and numerical approximation.

Students planning to teach secondary-school mathematics must major in mathematics and take a specific minor in education, which includes coursework and student teaching.

Mathematical training may lead to opportunities in applied research (natural sciences, engineering, economics, management, computer science) as well as in mathematical research, teaching, or industry.

## Programs

### Bachelor of Arts (BA)

- Mathematics (p. 681)

### Bachelor of Science (BS)

- Mathematics (p. 683)
- Biology and Mathematics (p. 601)
- Computer Science and Mathematics (p. 358)
- Data Science and Mathematics (p. 407)
- Economics and Mathematics (p. 690)
- Graphic and Information Design and Mathematics (p. 113)
- Mathematics and Business Administration (p. 282)
- Mathematics and Cultural Anthropology (p. 695)
- Mathematics and Physics (p. 696)
- Mathematics and Political Science (p. 697)
- Mathematics and Psychology (p. 699)
- Mathematics and Sociology (p. 700)

## Minor

- Mathematics (p. 702)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Mathematics, BA

The Bachelor of Arts degree requires at least 11 mathematics courses and two physics courses, in addition to the study of a foreign language. This program is appropriate for students who wish a broader liberal arts education.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Mathematics Major Grade Requirement

A grade of C or higher is required in all mathematics courses numbered 3000 and below and in MATH 4000.

### Mathematics Major Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>History of Mathematics</b>		
MATH 2201	History of Mathematics	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2331	Linear Algebra	4
MATH 3150	Real Analysis	4
or MATH 4565	Topology	
MATH 3175	Group Theory	4
MATH 3560	Geometry	4
or MATH 3527	Number Theory 1	
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Elective</b>		
Complete one course in the following range:		4
MATH 3001 to MATH 4899		

### Required Physics

Physics 1		Hours
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	

Physics 2		Hours
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

Capstone		Hours
Complete one of the following:		4
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	
MATH 4020	Research Capstone	

### Mathematics Major Credit Requirement

Complete 54 semester hours in the major.

### Upper-Division Electives

Note: Courses used as upper-division electives do not count toward the major or NUPath.

Code	Title	Hours
Complete three general electives numbered 3000 or above.		12

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation	0	Vacation	0
MATH 1365	4	PHYS 1165	4				
Elective	4	PHYS 1166	1				
PHYS 1161	4	Elective	4				
PHYS 1162	1	ENGW 1111	4				
MATH 1000	1						
		18			17		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	MATH 2201	4	Vacation	0	Co-op	0
MATH 2331	4	Elective	4				
Elective	4	Elective	4				
Foreign language core course	4	Foreign language core course	4				
		EESC 2000	1				
		16			17		

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		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MATH 3150	4	Upper-division elective	4	Co-op	0
		Elective	4	Upper-division elective	4		
		Elective	4				
		Upper-division elective	4				
		MATH 4000	1				
		0			17		

Year 5			
Fall	Hours	Spring	Hours
Co-op	0	MATH 3175	4
		MATH elective	4
		MATH 4025	4
		Elective	4
		0	16

Total Hours: 134

#### Five Years, Three Co-ops in Spring/Summer 1

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		

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						
Foreign language core course	4						
EESC 2000	1						
		17			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								
Foreign language core course	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	0	Elective	4		
MATH 3560 or 3527	4					Elective	4		
MATH 4000	1								
Foreign language core course	4								
Elective	4								
		17			0			0	8

Year 5			
Fall	Hours	Spring	Hours
MATH 3150	4	MATH 3175	4
MATH elective	4	MATH 4025	4
Elective	4	Upper-division elective	4
Upper-division elective	4	Upper-division elective	4
		16	16

Total Hours: 134

## Mathematics, BS

The Bachelor of Science degree requires 14 mathematics courses and 2 physics courses. It is the degree most commonly pursued by math majors and is the one recommended for those strongly interested in mathematics and science.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Mathematics Major Grade Requirement

A grade of C or higher is required in all mathematics courses numbered 3000 and below and in MATH 4000.

## Mathematics Major Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4

### 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
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### Mathematics Electives

Complete four courses in the following range:	16
MATH 3101 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 and PHYS 1152 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 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 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 66 semester hours in the major.



### Upper-Division Electives

Note: Courses used as upper-division electives do not count toward the major or NUPath.

Code	Title	Hours
	Complete three general electives numbered 3000 or above.	12

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 1341	4	MATH 1342	4	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				
18		17		0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2321	4	MATH 2341	4	Vacation	0
MATH 2331	4	Elective	4		
Elective	4	Elective	4		
Elective	4	Elective	4		
		EESC 2000	1		
16		17		0	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	MATH elective	4	MATH elective	4
		ENGW 3315	4	Elective	4
		MATH 3081	4		
		Upper-division elective	4		
		MATH 3000	1		
0		17		8	
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	MATH 3150	4	MATH elective	4
		MATH elective	4	Elective	4
		Elective	4		
		Upper-division elective	4		
		MATH 4000	1		
0		17		8	
Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	MATH 3175	4		

MATH elective	4
MATH 4025	4
Upper-division 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
PHYS 1161	4	MATH 1342	4	Vacation	0
PHYS 1162	1	PHYS 1165	4		
MATH 1365	4	PHYS 1166	1		
MATH 1341	4	ENGW 1111	4		
MATH 1000	1	Elective	4		
Elective	4				
18		17		0	
Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2321	4	Co-op	0	Co-op	0
MATH 2331	4				
Elective	4				
Elective	4				
EESC 2000	1				
17		0		0	
Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2341	4	Co-op	0	Co-op	0
MATH 3175	4				
Elective	4				
Elective	4				
MATH 3000	1				
17		0		8	
Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
ENGW 3315	4	Co-op	0	Co-op	0
MATH 3081	4				
MATH 4000	1				
MATH 3150	4				
Upper-division elective	4				
17		0		8	
Year 5					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH elective	4	Elective	4		
MATH elective	4	MATH 4025	4		

Upper-division elective	4	Upper-division elective	4
Elective	4	MATH elective	4
16		16	

Total Hours: 134

## Biology and Mathematics, BS

In the BS, combined biology and mathematics degree program, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In mathematics courses, students pursue mathematical reasoning, differential equations, and linear algebra, as well as statistics and probability. The fields of biology and mathematics are integrated in a range of course offerings including bioinformatics, applied statistics, advanced genomics, and biological imaging.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Biology Requirements

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or MATH 1000	Biology at Northeastern Mathematics at Northeastern	1
<b>Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5

### Biochemistry

BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
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### Intermediate/Advanced Biology

Complete one of the following:	4-5
BIOL 2327 to BIOL 3999 BIOL 4705 to BIOL 5999	

### Organismal and Population Biology Elective

Complete one of the following:	4-5
BIOL 2327	Human Parasitology
BIOL 3401	Comparative Vertebrate Anatomy
BIOL 3403	Animal Behavior
BIOL 3413	Current Topics in Organismal and Population Biology
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302
EEMB 2400	Introduction to Evolution
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700
EEMB 3460	Conservation Biology

### Mathematics Requirements

Code	Title	Hours
<b>Calculus 1</b>		
MATH 1341 or MATH 1251	Calculus 1 for Science and Engineering Calculus and Differential Equations for Biology 1	4
<b>Calculus 2 and Calculus 3</b>		
MATH 1342 or MATH 1252	Calculus 2 for Science and Engineering Calculus and Differential Equations for Biology 2	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Physics</b>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
<b>Required Mathematics Courses</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
<b>Mathematics Electives</b>		
Complete three of the following:	12	
MATH 2331 MATH 3001 to MATH 4899	Linear Algebra	

### Additional Requirements

Code	Title	Hours
<b>Experiential Learning Introduction</b>		
EESC 2000	Professional Development for Co-op	1

MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
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**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 and Modeling	

**Biology/Mathematics Integrative Courses**

Complete two of the following: 8-10

CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	
BIOL 3405	Neurobiology	
BIOL 5569	Advanced Microbiology	
BIOL 5581	Biological Imaging	
BIOL 5591	Advanced Genomics	
MATH 4581	Statistics and Stochastic Processes	
MATH 7343	Applied Statistics	
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6309	Bioinformatics Computational Methods 2	

**Writing Requirement**

ENGW 3307	Advanced Writing in the Sciences	4
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**Biology and Mathematics Combined-Major Credit/GPA Requirements**

Complete 93 semester hours in the major with a cumulative GPA of 2.000.

**Program Requirements**

143 total semester hours required

**Computer Science and Mathematics, BS**

The computer science and mathematics combined major was the first dual major created by the college. The mathematics requirements focus on courses that have computing applications or form the basis for further studies in mathematical theory. The program emphasizes the strong ties between computer science and mathematics that date back to the origins of machine computation in the 1930s and 1940s—and persist to this day.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
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**Computer Science Overview**

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
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CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
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CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
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CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
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**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
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CS 3500	Object-Oriented Design	4
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CS 3800	Theory of Computation	4
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CS 4300	Computer Graphics (Integrative course) <sup>1</sup>	4
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CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
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**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete eight credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 8

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

<sup>1</sup> CS 4300 satisfies the capstone requirement.

**Mathematics Courses**

Code	Title	Hours
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**Calculus Courses**

MATH 1341	Calculus 1 for Science and Engineering (a grade of C– or higher is required)	4
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MATH 1342	Calculus 2 for Science and Engineering (a grade of C– or higher is required)	4
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MATH 2321	Calculus 3 for Science and Engineering	4
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**Mathematics Courses**

MATH 2331	Linear Algebra	4
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MATH 2341	Differential Equations and Linear Algebra for Engineering	4
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MATH 3081	Probability and Statistics	4
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MATH 3175	Group Theory	4
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MATH 3527 Number Theory 1 4

**Mathematics Electives**

Complete three courses in the following range: 12  
 MATH 3001 to MATH 4999 but not MATH 4000

**Supporting Course**

Code	Title	Hours
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	Elective	4	Vacation
CS 1800 and CS 1802	5	CS 2800 and CS 2801	5	MATH 2321	4	
CS 2500 and CS 2501	5	MATH 1342	4			
MATH 1341	4	Elective	4			
ENGW 1111	4					
		19			18	8
						0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3500	4	CS 1210	1	Elective	4	Co-op
MATH 2331	4	CS 3000	4	MATH 3081	4	
MATH 2341	4	Khoury elective	4			
CS 3800	4	MATH 3527	4			
		MATH elective	4			
		16			17	8
						0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		Math elective	4	Elective	4	Co-op
		CS 4300	4	Elective	4	
		ENGW 3302	4			
		MATH 3175	4			
		THTR 1170	1			
		0			17	8
						0
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		CS 4500	4	Elective	4	
		Khoury elective	4	Elective	4	
		Math elective	4			
		Computing and social issues	4			
		0			16	8

Total Hours: 135

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 2800 and CS 2801	5				
MATH 1341	4	MATH 1342	4				
ENGW 1111	4	Elective	4				
CS 1200	1						
	19		18		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 3000	4	Vacation	0	Co-op	0
MATH 2321	4	MATH 2331	4				
MATH 2341	4	MATH 3081	4				
Elective	4	CS 1210	1				
		Elective	4				
	16		17		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 3800	4	Elective	4	Co-op	0
		CS 4300	4	Elective	4		
		MATH 3175	4				
		ENGW 3302	4				
		THTR 1170	1				
	0		17		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4500	4	Elective	4	Co-op	0
		MATH 3527	4	Elective	4		
		MATH elective	4				
		Khoury elective	4				
	0		16		8		0
Year 5							
Fall	Hours	Spring	Hours				
Co-op	0	Khoury elective	4				
		Computing and social issues	4				
		MATH elective	4				
		MATH elective	4				
	0		16				

Total Hours: 135

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	CS 2800 and CS 2801	5				
MATH 1341	4	MATH 1342	4				
ENGW 1111	4	Elective	4				
CS 1200	1						
	19		18		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	Co-op	0	Co-op	0	Vacation	0
MATH 2321	4						
MATH 2341	4						
CS 1210	1						
Elective	4						
	17		0		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op	0	Co-op	0	Elective	4
MATH 2331	4					Elective	4
MATH 3081	4						
Elective	4						
THTR 1170	1						
	17		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3800	4	Co-op	0	Co-op	0	Elective	4
CS 4300	4					Elective	4
MATH 3527	4						
ENGW 3302	4						
	16		0		0		8
Year 5							
Fall	Hours	Spring	Hours				
CS 4500	4	Khoury elective	4				
MATH 3175	4	Computing and social issues	4				
MATH elective	4	MATH elective	4				
Khoury elective	4	MATH elective	4				
	16		16				

Total Hours: 135

**Data Science and Mathematics, BS**

The data science and mathematics combined major combines computer science, data science, and mathematics into an integrated curriculum.

The program provides the rigorous theoretical background necessary for success in the data science field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800 (Integrative course)	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2810	Mathematics of Data Models	4
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4900	Data Science Senior Project	4

### Khoury Elective Courses

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS,CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

- CS 2500 or higher, except CS 5010
- CY 2000 or higher, except CY 4930
- DS 2500 or higher, except DS 4900
- IS 2000 or higher, except IS 4900

### Mathematics Courses

Code	Title	Hours
<b>Problem-Solving Requirement</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus Requirement</b>		
MATH 1341	Calculus 1 for Science and Engineering (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 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math Requirement</b>		
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4
<b>Mathematics Elective Requirement</b>		
Complete four courses in the following range:		16
MATH 3001 to MATH 4999 but not MATH 4000		

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
DS 4400	Machine Learning and Data Mining 1	4

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 20 credits of general electives.		20

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUPath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major



Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	
CS 1200	1	CS 2510 and CS 2511	5	MATH 2321	4	
CS 1800 and CS 1802	5	MATH 1342	4	CS 3500	4	
CS 2500 and CS 2501	5	MATH 1365	4			
MATH 1341	4	Elective	4			
ENGW 1111	4					
19		17		8		
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
MATH 2331	4	CS 1210	1	MATH 3081	4	Co-op
MATH 2341	4	MATH 3527	4	Elective	4	
CS 3200	4	CS 2810	4			
DS 3000	4	DS 4200	4			
		MATH elective	4			
16		17		8		0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		DS 4300	4	ENGW 3302	4	Co-op
		DS 4400	4	Elective	4	
		MATH 3175	4			
		MATH elective	4			
		THTR 1170	1			
0		17		8		0
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	
Co-op		DS 4900	4	Elective	4	
		Khoury elective	4	Elective	4	
		MATH elective	4			
		MATH 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
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation
CS 2500 and CS 2501	5	MATH 1342	4			
MATH 1341	4	MATH 1365	4			
ENGW 1111	4	Elective	4			
CS 1200	1					
19		17		0		0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3500	4	CS 1210	1	Vacation	0	Co-op
MATH 2321	4	CS 3200	4			
DS 3000	4	CS 2810	4			
MATH 2341	4	MATH 2331	4			
		MATH 3081	4			
16		17		0		0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		MATH 3175	4	ENGW 3302	4	Co-op
		DS 4200	4	Elective	4	
		DS 4300	4			
		THTR 1170	1			
		Elective	4			
0		17		8		0
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		MATH 3527	4	Elective	4	Co-op
		DS 4400	4	Elective	4	
		MATH elective	4			
		MATH elective	4			
0		16		8		0
Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		DS 4900	4			
		Khoury elective	4			
		MATH elective	4			
		MATH elective	4			
0		16				

Total Hours: 134

**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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or MATH 1000	Economics at Northeastern Mathematics at Northeastern	1
<b>Required Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 4 economics electives found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Mathematics Requirements

Code	Title	Hours
<b>Required Mathematics</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Mathematics Electives</b>		
Complete two courses in the following range:		8

MATH 3001 to MATH 4999

The following courses are recommended:	
MATH 3150	Real Analysis
MATH 4581	Statistics and Stochastic Processes

### Breadth Course

Code	Title	Hours
<b>Computer Science</b>		
Choose one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	

### Integrative Requirements

Code	Title	Hours
<b>Advanced Writing in the Disciplines</b>		
ENGW 3308	Advanced Writing in the Social Sciences	4
<b>Integrative Course</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

### Combined-Major GPA/Credit Requirement

Code	Title	Hours
Grades in the following 4 Economics courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2560	Applied Econometrics	
MATH 3081	Probability and Statistics	

A cumulative GPA of 2.000 is required in all math courses. A grade of C or higher is required in all math courses numbered MATH 2999 or below; grades below C will not count toward the degree.

### Economics and Mathematics Major Credit Requirement

Complete 76 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	ECON 1116	4	MATH 2321	4	Elective	4
MATH 1365	4	MATH 1342	4	Elective	4	Elective	4
MATH 1341	4	ENGW 3308	4				
CS 1100	4	Elective	4				
		16			16	8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2315	4	ECON 2316	4	Elective	4	Co-op	
MATH 2341	4	ECON elective 1		MATH 3081	4		
Elective	4	MATH 2331	4				
Elective	4	Math elective 1	4				
		16	16		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 2560	4	Elective	4	Co-op	
		ECON elective 2		Elective	4		
		Math elective 2	4				
		Elective	4				
		0	16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		ECON elective 3	4
		ECON elective 4	4
		ECON 4692, MATH 4025, or MATH 5131	4
		Elective	4
		0	16

Total Hours: 128

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Analyzing and

Using Data (AD), and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Difference and Diversity (DD), and Ethical Reasoning (ER) must be met through electives.

### Graphic and Information Design Requirements

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000 or MATH 1000	Art and Design at Northeastern Mathematics at Northeastern	1
<b>Art and Design Fundamentals</b>		
Complete one course in the following range. ARTF 1143 is recommended. ARTF 1141 to ARTF 1149		4
ARTF 1122	Color and Composition (with optional ARTF 1123)	4
<b>Art and Design History</b>		
ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4
<b>Design</b>		
ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4
<b>Degree Project</b>		
ARTG 4550	Design Degree Project 1	4
<b>Art and Design Elective</b>		
Complete one of the following:		4
ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124 and ARTF 1125	Form and Structure and Form and Structure Tools	
ARTF 2223	Experience and Interaction (with optional ARTF 2224 )	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401 )	
ARTG 3351	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	

### Mathematics Requirements

Code	Title	Hours
<b>Math Reasoning</b>		
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 Math**

MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4

**Advanced Elective**

Complete one of the following:		4
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	4

**Combined-Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample 5-Year Plan of Study , 2 Co-op**

Year 1			
Fall	Hours	Spring	Hours
ARTF 1000	1	MATH 1342	4
ARTF 1143	4	ARTF 1122 (with optional ARTF 1123)	4
MATH 1365	4	ARTG 1250	4
MATH 1341	4	ARTH 2210	4
ENGW 1111	4		
		17	16

Year 2			
Fall	Hours	Spring	Hours
MATH 2321	4	MATH 2341	4
ARTG 2250	4	ARTG 2252	4
ARTH 2215	4	Math elective	4
Elective	4	Elective	4
		16	16

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 2331	4	Co-op		Co-op	
ARTG 3350	4				
Elective	4				

Elective	4		
EEAM 2000	1		
		17	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
MATH 3081	4	Co-op		Co-op	
ARTG 3451	4				
Elective	4				
Elective	4				
		16	0		0

**Year 5**

Fall	Hours	Spring	Hours
ARTG 4550	4	Capstone	4
Art and Design Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 130

**Mathematics and Business Administration, BS**

A combined major combines two majors in a way that allows a student to fulfill all requirements within the standard 128 credits. For details, see program requirements.

Current students can also find details about combined majors and minors by going to their audit, clicking on “explore options,” and finding the appropriate program. Students will be able to see a list of required courses and will be able to track their progress toward fulfilling them.

In the BS combined mathematics and business administration degree program, business and mathematics courses lay the groundwork for strong basic training in finance.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Mathematics Requirements**

Code	Title	Hours
<b>Required Courses</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 1365	Introduction to Mathematical Reasoning	4

MATH 3081	Probability and Statistics	4
<b>Calculus and Linear Algebra (Required) and Differential Equations (Recommended)</b>		
Complete either Option 1 or Option 2 below:		8
<i>Option 1 (Recommended)</i>		
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	
<i>Option 2</i>		
MATH 2321	Calculus 3 for Science and Engineering	
or MATH 2323	Calculus 3 for Business, Economics, and Mathematics	
MATH 2331	Linear Algebra	
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Electives</b>		
Complete three courses in the range MATH 3001 to MATH 5999. The following courses are recommended:		12
MATH 4681	Probability and Risks	
MATH 4682	Theory of Interest and Basics of Life Insurance	
MATH 4581	Statistics and Stochastic Processes	

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4
<b>Strategy in Action</b>		
STRT 4501	Strategy in Action	4

## Integrative Course

Note: Financial Risk Management (FINA 4512) also counts toward the finance concentration.

Code	Title	Hours
FINA 4512	Financial Risk Management	4

## Finance Concentration

Code	Title	Hours
<b>Finance Requirements</b>		
FINA 3301	Corporate Finance	4
FINA 3303	Investments	4
FINA 4512	Financial Risk Management	4
<b>Finance Elective</b>		
Complete one of the following:		4

ENTR 3520	Impact Investing and Social Finance	
or FINA 2720	Sustainability in the Business Environment	
FINA 4604	Fixed-Income Securities (Recommended)	
FINA 4310	Working Capital Management	
FINA 4312	Issues in Corporate Governance	
FINA 4320	International Financial Management	
FINA 4410	Valuation and Value Creation	
FINA 4412	Personal Financial Planning	
FINA 4420	Mergers and Acquisitions	
FINA 4514	Investment Banking	
FINA 4516	Real Estate Finance	
FINA 4526	Core Topics in Alternative Investments	
FINA 4602	Turnaround Management	
FINA 4604	Fixed-Income Securities	
FINA 4608	Advanced Financial Strategy	
FINA 4610	Entrepreneurial Finance, Innovation 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.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Supplemental Courses

Code	Title	Hours
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESC 2000	Professional Development for Co-op	

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Mathematics GPA Requirement

Minimum 2.000 GPA required in all mathematics courses

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

**Program Requirement**

128 total semester hours required

**Mathematics and Cultural Anthropology, BS**

In the BS combined mathematics and cultural anthropology degree program, anthropology and mathematics courses lay the groundwork for strong basic training that is designed to train the student to use mathematical models and methodologies for the study of problems in cultural anthropology.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 3001 to MATH 5999		

**Anthropology Requirements**

Code	Title	Hours
<b>Anthropology Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 2305	Global Markets and Local Culture	4
<b>Anthropology Area Courses</b>		

Complete two of the following. Additional area courses may count as anthropology electives: 8

ANTH 4350	Ethnography of Southeast Asia
ANTH 4500	Latin American Society and Development
ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Anthropology Electives**

Complete three 4-semester-hour courses in addition to the requirements stated above. One study-abroad course may count toward this requirement with prior permission from the department. 12

ANTH 2000 to ANTH 4990	
<b>Capstone Requirement</b>	
ANTH 4600	Senior Seminar 4

**Integrative Requirement**

Code	Title	Hours
Complete one of the following: 4		
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	
Complete the following: 4		
ANTH 3120	Consumer Cultures	
Total Hours		8

**Mathematics and Anthropology Combined-Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation		Vacation	
MATH 1365	4	Foreign language course	4				
ANTH 1101	4	ANTH 2305	4				
ENGW 1111	4	Elective	4				
		16			16	0 0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	ANTH elective	4	Vacation		Vacation	
ANTH 3410	4	MATH 2331	4				
MATH 2341	4	Foreign language course	4				
ANTH elective	4	MATH 3081	4				
		16			16	0 0	



**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		MATH elective	4	Elective	4	Vacation	
		Elective	4	Elective	4		
		ANTH elective	4				
		ANTH advanced area course	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ANTH 3421	4	MATH elective	4	Vacation	
		MATH elective	4	Elective	4		
		ANTH advanced area course	4				
		ANTH advanced area course	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ANTH 4600	4
		ANTH advanced area course	4
		Elective	4
		Integrative course	4
	0		16

Total Hours: 128

**Mathematics and Physics, BS**

Mathematics and physics have been linked since antiquity. By combining physics and mathematics you can take closely related courses in each discipline, such as statistical mechanics and stochastic processes, mechanics and dynamical systems, thermodynamics and Fourier Series, and quantum mechanics and partial differential equations. The two departments jointly offer a course in mathematical methods in physics.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Mathematics Requirements**

Code	Title	Hours
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
MATH 3150	Real Analysis	4
MATH 3175	Group Theory	4
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Elective</b>		
Complete one course in the following range:		4
MATH 3101 to MATH 4899		

**Physics Requirements**

Code	Title	Hours
<b>Physics 1</b>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<b>Physics 2</b>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
<b>Elective Courses</b>		
Complete two courses in the following range:		8
PHYS 3000 to PHYS 7999		

### Integrative Courses

Code	Title	Hours
PHYS 3601	Classical Dynamics	4
MATH 4545 or MATH 4525	Fourier Series and PDEs Applied Analysis	4

### Combined Major Credit Requirement

Complete 83 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Notes on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

Please contact your academic adviser for additional information and plans of study.

### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation	0	Vacation	0
ENGW 1111	4	PHYS 1165	4				
Elective	4	PHYS 1166	1				
PHYS 1161	4	Elective	4				
PHYS 1162	1	Elective	4				
MATH 1000	1						
		18		17		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	MATH 2341	4	Vacation	0	Co-op	0
Elective	4	MATH 2331	4				
PHYS 2303	4	Elective	4				
PHYS 2371	3	EESC 2000	1				
PHYS 2372	1	PHYS 3601	4				
		16		17		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHYS 3602	4	PHYS 3600	4	Co-op	0
		MATH 3150	4	MATH 3081	4		
		Elective	4				
		MATH 3000	1				
		PHYS 4305	4				
		0		17		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MATH 3175	4	Elective	4	Co-op	0
		MATH elective	4	Elective	4		
		PHYS undergraduate elective	4				

Year 5				
Fall	Hours	Spring	Hours	Hours
Co-op	0	PHYS undergraduate elective	4	
		PHYS undergraduate elective	4	
		MATH 4025	4	
		MATH 4545	4	
		0		16

Total Hours: 133

## Mathematics and Political Science, BS

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Mathematics Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4

### Math Electives

Complete two courses in the following range that are not required in the requirements above:

MATH 30001 to MATH 5999

## Political Science Requirements

Code	Title	Hours
<b>Political Science Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
POLS 2325	Ancient Philosophy and Political Thought	4
POLS 2328	Modern Political Thought	4
POLS 2330	American Political Thought	4
POLS 2332	Contemporary Political Thought	4
<b>Political Science Electives</b>		
Complete three POLS courses numbered 2000 and above.		12

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below.

- American political institutions (p. )
- Campaigns and elections (p. 698)
- Comparative politics (p. 698)
- Identity, culture, and politics (p. 698)
- International relations and diplomacy (p. 699)
- Law and legal studies (p. 699)
- Public policy (p. 699)
- Security studies (p. 699)

## 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 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Mathematics and Psychology, BS**

In the mathematics and psychology combined-major BS program, psychology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare the student toward developing psychological models using mathematics.

**Program Requirements**

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 3001 to MATH 5999		

**Psychology Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<b>Area A (Personality/Social Basis of Behavior)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Area B (Biological/Cognitive Basis of Behavior)</b>		
Complete two of the following:		8
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Laboratory</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	

700 Mathematics and Sociology, BS

PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology
<b>Psychology Capstone Requirement</b>	
Complete one of the following: 4	
PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

<b>Psychology Elective</b>	
Any PSYC course in the 3000 range and up	4

**Integrative Requirement**

Code	Title	Hours
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4

**Mathematics and Psychology Combined-Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1365	4	MATH 1341	4	Vacation		Vacation	
PSYC 1101	4	PSYC Area A	4				
NUpath EI	4	Open elective	4				
ENGW 1111	4	NUpath IC	4				
MATH 1000 or PSYC 1000	1						
		17	16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1342	4	MATH 2321	4	Vacation		Co-op	
PSYC 2320	4	PSYC Area A	4				
PSYC Area B	4	Open elective	4				

NUpath DD	4	MATH elective	4				
		EESC 2000	1				
		16	17		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		MATH 2331	4	MATH 2341	4	Co-op	
		PSYC Area B	4	Adv writing	4		
		PSYC elective	4				
		Open elective	4				
		0	16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PSYC lab	4	Open elective	4	Co-op	
		MATH 3081	4	Open elective	4		
		PSYC 4540	4				
		NUpath ER	4				
		0	16		8		0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PSYC seminar	4				
		MATH elective	4				
		Open elective	4				
		Open elective	4				
		0	16				

Total Hours: 130

**Mathematics and Sociology, BS**

In the mathematics and sociology combined-major BS program, sociology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare students toward developing sociological models using mathematics.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Mathematics Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 30001 to MATH 5999		

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Sociology Electives</b>		
Complete one course from each course range:		
<i>Introductory Elective</i>		4
SOCL 1101 to SOCL 1999		
<i>Intermediate Elective</i>		4
SOCL 2000 to SOCL 3999		
<i>Advanced Elective</i>		4
SOCL 4000 to SOCL 4999		
<b>Capstone Requirement</b>		
SOCL 4600	Senior Seminar	4

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		4
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

### Mathematics and Sociology Combined Major Credit Requirement

Complete 68 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation		Vacation	
MATH 1365	4	SOCL 2320	4				
ANTH 1101	4	SOCL 3300	4				
ENGW 1111	4	Elective	4				
		16		16		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	MATH 2341	4	Vacation		Vacation	
ANTH 2305	4	Elective	4				
SOCL 2321	4	SOCL elective	4				
Elective	4	MATH elective	4				
		16		16		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2331	4	Co-op		Co-op		Vacation	
Elective	4						
SOCL elective	4						
MATH elective	4						
		16		0		0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 3081	4	Co-op		Co-op		Vacation	
SOCL elective	4						
Elective	4						
Elective	4						
		16		0		0	
Year 5							
Fall	Hours	Spring	Hours				
Elective	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Capstone	4				
Elective	4	Integrative course	4				
		16		16			

Total Hours: 128



## Mathematics, Minor

A math minor can be combined with any other major at Northeastern and can be obtained by completing six math courses: two calculus courses, two intermediate courses, and two upper-level courses.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4

Biology majors may substitute the following two courses:

MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	

### Intermediate-Level Courses

Code	Title	Hours
Complete two of the following:		8
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	
MATH 2331	Linear Algebra	

### Mathematics Electives

Code	Title	Hours
Complete two courses in the following range:		8
MATH 3001 to MATH 4699 <sup>1</sup>		

<sup>1</sup> MATH 4000 is excluded.

### GPA Requirement

2.000 GPA required in the minor

## Physics

Website (<http://www.northeastern.edu/cos/physics/>)

**Mark C. Williams, PhD**  
Professor and Chair

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 world-renowned faculty.

## Programs

### Bachelor of Science (BS)

- Physics (p. 703)
- Applied Physics (p. 705)
- Biomedical Physics (p. 706)
- Computer Science and Physics (p. 368)
- Data Science and Physics (p. 409)
- Mathematics and Physics (p. 696)
- Physics and Music with Concentration in Music Technology (p. 226)
- Physics and Philosophy (p. 717)

### Bachelor of Science in Chemical Engineering (BSCHE)

- Chemical Engineering and Physics (p. 435)

### Bachelor of Science in Computer Engineering (BSCompE)

- Computer Engineering and Physics (p. 463)

### Bachelor of Science in Electrical Engineering (BSEE)

- Electrical Engineering and Physics (p. 472)

### Bachelor of Science in Mechanical Engineering (BSME)

- Mechanical Engineering and Physics (p. 495)

### Minor

- Physics (p. 730)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Physics, BS

The physics program provides a strong foundation in classical and modern physics, including studies of the various physical phenomena such as electromagnetism, dynamics, building blocks of matter, energy, and radiation.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
<b>Elective Course</b>		
Complete one of the following:		4

MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 3500 to PHYS 7999		

### Experiential Learning

Complete one course in experiential learning. See department for approved courses. Note: The experiential learning requirement is waived following a student presentation connected with a co-op and/or research experience. The requirement is often fulfilled by a talk at a Society of Physics Students meeting but can be fulfilled by an adequately documented presentation at a professional meeting or at an appropriate campus event. Contact your faculty adviser for additional information.

### Senior Capstone

PHYS 5318	Principles of Experimental Physics	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Computational Methods</b>		
PHYS 1211	Computational Problem Solving in Physics	4
or PHYS 1130	Computing, Data, and Science	
or GE 1111	Engineering Problem Solving and Computation	
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	5
<b>Technical Electives</b>		
Complete 8 semester hours from the following:		8
MATH 2280	Statistics and Software	
MATH 2321 to MATH 5999		
PHYS 2303 to PHYS 7999		
CHEM 2311 to CHEM 5999		
BIOL 2301 to BIOL 5999		
ENVR 2300 to ENVR 5999		
CS 2990 to CS 4900		
CHME 2001 to CHME 4699		
CIVE 2001 to CIVE 4699		
EECE 2001 to EECE 5999		
ME 2001 to ME 4699		
IE 2001 to IE 4699		

### Physics Major Credit Requirement

Complete 91 semester hours in the major.

### Program Requirement

133 total semester hours required

## Plan of Study

### Note on Physics Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, **depending on the year of entry for that student.** See course offering schedule at the end of the plan of study.

Please contact your academic advisor for additional information and plans of study.

#### FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation		Vacation	
PHYS 1161	4	PHYS 1166	1				
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	PHYS 1211	4				
MATH 1341	4	MATH 1342	4				
ENGW 1111	4	Elective	4				
Elective	4						
		18				0	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	PHYS 3601	4	Vacation		Co-op	
PHYS 2371	3	MATH 2331	4				
PHYS 2372	1	MATH 2341	4				
MATH 2321	4	Elective	4				
CHEM 1211	4	EESC 2000	1				
CHEM 1212	1						
CHEM 1213	0						
		17				0	

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHYS 3602	4	PHYS 3600	4	Co-op	
		MATH 3081	4	PHYS 3603	4		
		Elective	4				
		Elective	4				
		0				16	

##### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHYS 4115	4	Technical Elective	4	Co-op	
		PHYS 4305	4	Elective	4		
		ENGW 3307	4				
		Elective	4				
		0				16	

##### Year 5

Fall	Hours	Spring	Hours
Co-op		PHYS 5318	4
		PHYS advanced elective	4
		Technical elective	4

Elective	Hours
	4
	0
	16

Total Hours: 133

### Odd-Numbered Year One

#### FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER 1

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	MATH 2321	4	MATH 2331	4
PHYS 1161	4	PHYS 1166	1	Elective	4	MATH 2341	4
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	MATH 1342	4				
MATH 1341	4	PHYS 1211	4				
ENGW 1111	4	CHEM 1211	4				
Elective	4	CHEM 1212	1				
		CHEM 1213	0				
		18				8	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	Co-op		Co-op		PHYS 3600	4
PHYS 2371	3					Elective	4
PHYS 2372	1						
PHYS 3602	4						
Elective	4						
EESC 2000	1						
		17				0	

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 3601	4	Co-op		Co-op		MATH 3081	4
PHYS 3603	4					Elective	4
Elective	4						
Elective	4						
		16				0	

##### Year 4

Fall	Hours	Spring	Hours
PHYS 4115	4	PHYS 5318	4
PHYS 4305	4	PHYS advanced elective	4
ENGW 3307	4	Technical elective	4
Technical Elective	4	Elective	4
		16	

Total Hours: 133

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring

- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring
- PHYS 5318 offered every spring

## Applied Physics, BS

The applied physics BS degree is a flexible, interdisciplinary-oriented program designed to provide students with a solid background in basic physics, in conjunction with the opportunity to sample courses from a wide range of disciplines, including engineering, biology, chemistry, math, environmental studies, and computer science. This program seeks to enable students to prepare for a variety of careers in, for example, nanotechnology, a medical field, environmental research, or even finance.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Applied Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4

PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Advanced Physics Electives

Complete three of the following:		12
PHYS 3601	Classical Dynamics	
PHYS 4115	Quantum Mechanics I	
PHYS 5111	Astrophysics and Cosmology	
PHYS 5113	Introduction to Particle and Nuclear Physics	
PHYS 5116	Complex Networks and Applications	
PHYS 4621	Biological Physics 1	
PHYS 4623	Medical Physics	
PHYS 4651	Medical Physics Seminar 1	
PHYS 4652	Medical Physics Seminar 2	
PHYS 5260	Introduction to Nanoscience and Nanotechnology	
MATH 4606	Mathematical and Computational Methods for Physics	

### Experiential Learning

Note: The experiential learning requirement is waived following a student presentation connected with a co-op and/or research experience. The requirement is often fulfilled by a talk at a Society of Physics Students meeting but can be fulfilled by an adequately documented presentation at a professional meeting or at an appropriate campus event. Contact your faculty adviser for additional information.

PHYS 4996	Experiential Education Directed Study	4
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### Senior Capstone

PHYS 5318	Principles of Experimental Physics	4
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### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
<b>Computational Methods</b>		
PHYS 1211	Computational Problem Solving in Physics	4
or PHYS 1130	Computing, Data, and Science	
or GE 1111	Engineering Problem Solving and Computation	
<b>Chemistry</b>		
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	5
<b>Technical Electives</b>		
Complete 16 semester hours of technical electives from the following:		16
MATH 2280	Statistics and Software	
MATH 2321 to MATH 5999		
PHYS 2303 to PHYS 7999		
CHEM 2311 to CHEM 5999		

BIOL 2301 to BIOL 5999

ENVR 2300 to ENVR 5999

CS 2990 to CS 4900

CHME 2001 to CHME 4699

CIVE 2001 to CIVE 4699

EECE 2001 to EECE 5999

ME 2001 to ME 4699

IE 2001 to IE 4699

## Applied Physics Major Credit Requirement

Complete 91 semester hours in the major.

## Program Requirement

133 total semester hours required

## Plan of Study

### Note on Applied Physics Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

Please contact your academic adviser for additional information and plans of study.

## FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation	0	Vacation	0
PHYS 1161	4	PHYS 1166	1				
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	PHYS 1211	4				
MATH 1341	4	MATH 1342	4				
ENGW 1111	4	Elective	4				
Elective	4						
	18		17		0		0

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	Co-op	0	Co-op	0	MATH 2341	4
PHYS 2371	3					PHYS 4305	4
PHYS 2372	1						
MATH 2321	4						
CHEM 1211	4						
CHEM 1212	1						
CHEM 1213	0						
EESC 2000	1						
	18		0		0		8

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 3602	4	Co-op	0	Co-op	0	PHYS 3600	4
MATH 2331	4					Elective	4
Technical elective	4						
Technical elective	4						
	16		0		0		8

### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3307	4	Co-op	0	Co-op	0	Vacation	0
Technical elective	4						
Technical elective	4						
Elective	4						
	16		0		0		0

### Year 5

Fall	Hours	Spring	Hours
PHYS 3603	4	PHYS 5318	4
Elective	4	PHYS advanced elective	4
Elective	4	PHYS advanced elective	4
Elective	4	PHYS advanced elective	4
	16		16

Total Hours: 133

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

## Biomedical Physics, BS

The biomedical physics program seeks to understand the role of physical processes occurring on molecular, cellular, or macroscopic scales; in vital biological functions, ranging from the interaction of chemicals with DNA, to the extraction of oxygen from red blood cells, to the generation of complex electrical signals in the brain and nervous system; and physical principles of medical devices. The biomedical physics program also offers a premed (prehealth) specialized track.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Biomedical Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
<b>Biomedical Physics</b>		
PHYS 4621	Biological Physics 1	4
PHYS 4623	Medical Physics	4
PHYS 4651	Medical Physics Seminar 1	4
PHYS 4652	Medical Physics Seminar 2	4
<b>Advanced Physics Elective</b>		
Complete one of the following:		4
MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 2300 to PHYS 7999		
<b>Experiential Learning</b>		
Note: The experiential learning requirement is waived following a student presentation connected with a co-op and/or research experience. The requirement is often fulfilled by a talk at a Society of Physics Students meeting but can be fulfilled by an adequately documented presentation at a professional meeting or at an appropriate campus event. Contact your faculty advisor for additional information.		4
PHYS 4996	Experiential Education Directed Study	4

<b>Senior Capstone</b>		
PHYS 5318	Principles of Experimental Physics	4

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
<b>Computational Methods</b>		
PHYS 1211	Computational Problem Solving in Physics	4
or PHYS 1130	Computing, Data, and Science	
or GE 1111	Engineering Problem Solving and Computation	

<b>Biology</b>		
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5

<b>Chemistry</b>		
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211	5

<b>Technical Electives</b>		
Complete two of the following:		8
MATH 2280	Statistics and Software	
MATH 2321 to MATH 5999		
PHYS 2303 to PHYS 7999		
CHEM 2311 to CHEM 5999		
BIOL 2301 to BIOL 5999		
ENVR 2300 to ENVR 5999		
CS 2990 to CS 4900		
CHME 2001 to CHME 4699		
CIVE 2001 to CIVE 4699		
EECE 2001 to EECE 5999		
ME 2001 to ME 4699		
IE 2001 to IE 4699		

## Biomedical Physics Major Credit Requirement

Complete 97 semester hours in the major.

## Program Requirement

135 total semester hours required

## Plan of Study

### Additional Recommended Courses for Premedical School Track

In addition to the required courses for the BS in Biomedical Physics, students who are pursuing the premed/health track are encouraged to enroll in the following courses, utilizing available elective slots:

Code	Title	Hours
CHEM 1214 and CHEM 1215 and CHEM 1216	General Chemistry 2 and Lab for CHEM 1214 and Recitation for CHEM 1214	5



CHEM 2311 and CHEM 2312 and CHEM 2319	Organic Chemistry 1 and Lab for CHEM 2311 and Recitation for CHEM 2311	5
CHEM 2313 and CHEM 2314 and CHEM 2320	Organic Chemistry 2 and Lab for CHEM 2313 and Recitation for CHEM 2313	5
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
MATH 2280	Statistics and Software	4

### Note on Biomedical Physics Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

### FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation	0	Vacation	0
ENGW 1111	4	PHYS 1166	1				
MATH 1341	4	PHYS 1167	0				
PHYS 1161	4	MATH 1342	4				
PHYS 1162	1	PHYS 1211	4				
PHYS 1163	0	BIOL 1113	4				
BIOL 1111	4	BIOL 1114	1				
BIOL 1112	1						
	19		18		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	Co-op	0	Co-op	0	Vacation	0
PHYS 2371	3						
PHYS 2372	1						
MATH 2321	4						
CHEM 1211	4						
CHEM 1212	1						
CHEM 1213	0						
EESC 2000	1						
	18		0		0		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 4621	4	Co-op	0	Co-op	0	MATH 2341	4
PHYS 4623	4					PHYS 3600	4
Technical elective	4						
Elective	4						
	16		0		0		8

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 3602	4	Co-op	0	Co-op	0	PHYS 4305	4
PHYS 4651	4					Elective	4
Technical elective	4						
Elective	4						
	16		0		0		8

#### Year 5

Fall	Hours	Spring	Hours
PHYS 3603	4	PHYS 4652	4
ENGW 3307	4	PHYS 5318	4
Elective	4	PHYS advanced elective	4
Elective	4	Elective	4
	16		16

Total Hours: 135

PHYS 2303 offered every fall & spring

PHYS 2305 offered every spring & summer 2 (even years)

PHYS 2371/2372 offered every fall

PHYS 3600 offered every summer 1 & summer 2

PHYS 3601 offered spring & fall (even years)

PHYS 3602 offered every fall & spring

PHYS 3603 offered fall (even years) & summer 1 (odd years)

PHYS 5115 offered every fall & spring

PHYS 5318 offered every spring

PHYS 4621 offered fall (even years) & spring (odd years)

PHYS 4623 offered fall & summer 1 (even years)

PHYS 4651 offered fall & spring (odd years)

PHYS 4652 offered every spring

## Mathematics and Physics, BS

Mathematics and physics have been linked since antiquity. By combining physics and mathematics you can take closely related courses in each discipline, such as statistical mechanics and stochastic processes, mechanics and dynamical systems, thermodynamics and Fourier Series, and quantum mechanics and partial differential equations. The two departments jointly offer a course in mathematical methods in physics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Mathematics Requirements

Code	Title	Hours
<b>Calculus</b>		
A grade of C or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Math</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
MATH 3150	Real Analysis	4
MATH 3175	Group Theory	4
<b>Co-op Reflections</b>		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
<b>Mathematics Elective</b>		
Complete one course in the following range:		4
MATH 3101 to MATH 4899		

## Physics Requirements

Code	Title	Hours
<b>Physics 1</b>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<b>Physics 2</b>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
<b>Elective Courses</b>		

Complete two courses in the following range: 8  
PHYS 3000 to PHYS 7999

## Integrative Courses

Code	Title	Hours
PHYS 3601	Classical Dynamics	4
MATH 4545 or MATH 4525	Fourier Series and PDEs Applied Analysis	4

## Combined Major Credit Requirement

Complete 83 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Notes on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

Please contact your academic adviser for additional information and plans of study.

## Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation	0	Vacation	0
ENGW 1111	4	PHYS 1165	4				
Elective	4	PHYS 1166	1				
PHYS 1161	4	Elective	4				
PHYS 1162	1	Elective	4				
MATH 1000	1						
		18		17		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	MATH 2341	4	Vacation	0	Co-op	0
Elective	4	MATH 2331	4				
PHYS 2303	4	Elective	4				
PHYS 2371	3	EESC 2000	1				
PHYS 2372	1	PHYS 3601	4				
		16		17		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHYS 3602	4	PHYS 3600	4	Co-op	0
		MATH 3150	4	MATH 3081	4		
		Elective	4				
		MATH 3000	1				
		PHYS 4305	4				
		0		17		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	MATH 3175	4	Elective	4	Co-op	0
		MATH elective	4	Elective	4		

PHYS undergraduate elective	4			
ENGW 3315	4			
	0	16	8	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	PHYS undergraduate elective	4
		PHYS undergraduate elective	4
		MATH 4025	4
		MATH 4545	4
	0	16	

Total Hours: 133

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4

### Computer Science Senior Seminar

THTR 1170	The Eloquent Presenter	1
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### Physics Courses

Code	Title	Hours
<b>Required Courses</b>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371 (Integrative course)	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Capstone and Electives

Code	Title	Hours
<b>Capstone</b>		
	Complete either one computer science capstone or the physics capstone:	4
<i>Computer Science Capstone</i>		
CS 4100	Artificial Intelligence	
CS 4300	Computer Graphics	
CS 4410	Compilers	
CS 4150	Game Artificial Intelligence	
CS 4550	Web Development	
<i>Physics Capstone</i>		
PHYS 5318	Principles of Experimental Physics	

### Khoury Elective

The computer science elective is not required if the student has completed the computer science capstone (above). With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Physics Elective

Only one physics elective is required if the student has completed the physics capstone (above).

Complete two courses in the following range: **8**  
 PHYS 3000 to PHYS 5999

### Integrative Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering (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 2321	Calculus 3 for Science and Engineering	4
<b>Additional Mathematics Requirements</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 4525	Applied Analysis	4

### Supporting Course

Code	Title	Hours
Complete one of the following: <b>4</b>		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3315	Advanced Writing in the Technical Professions Interdisciplinary Advanced Writing in the Disciplines	4

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation

- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

136 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	MATH 1342	4	MATH 2321	4		
CS 2500 and CS 2501	5	PHYS 1165	4				
MATH 1341	4	PHYS 1166	1				
PHYS 1161	4	ENGW 1111	4				
PHYS 1162	1						
		20		18		8	
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 2800 and CS 2801	5	CS 3000	4	Elective	4	Co-op	
MATH 2341	4	PHYS 3602	4	Elective	4		
PHYS 2371	3	PHYS 4305	4				
PHYS 2372	1	Computing and social issues	4				
PHYS 2303	4	CS 1210	1				
		17		17		8	
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 3800	4	PHYS 3600	4	Co-op	
		Elective	4	Elective	4		
		PHYS elective if CS capstone (Khoury elective if PHYS capstone)	4				
		CS or PHYS capstone	4				

	THTR 1170	1			
	0	17	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	CS 4500	4	Elective	4	
	MATH 4525	4	Elective	4	
	PHYS elective	4			
	ENGW 3302	4			
	0	16	8		

Total Hours: 137

**Five Years, Three Co-ops in Summer 2/Fall**

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	MATH 1342	4				
CS 2500 and CS 2501	5	PHYS 1165	4				
MATH 1341	4	PHYS 1166	1				
PHYS 1161	4	ENGW 1111	4				
PHYS 1162	1						
	20		18		0		0

<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 3500	4	CS 3000	4	Vacation	0	Co-op	0
PHYS 2303	4	MATH 2321	4				
PHYS 2371	3	MATH 2341	4				
PHYS 2372	1	PHYS 4305	4				
CS 2800 and CS 2801	5	CS 1210	1				
	17		17		0		0

<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
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		17		8		0

<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	CS 4500	4	Elective	4	Co-op	0
		MATH 4525	4	Elective	4		
		PHYS elective	4				
		Computing and social issues	4				
	0		16		8		0

<b>Year 5</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Co-op	0	CS or PHYS capstone	4
		PHYS elective if CS capstone (Khoury elective if PHYS capstone)	4
		Elective	4
		Elective	4
	0		16

Total Hours: 137

**Five Years, Three Co-ops in Spring/Summer 1**

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	MATH 1342	4				
PHYS 1161	4	PHYS 1165	4				
PHYS 1162	1	PHYS 1166	1				
CS 1200	1	ENGW 1111	4				
MATH 1341	4						
	20		18		0		0

<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 3500	4	Co-op	0	Co-op	0	Vacation	0
PHYS 2303	4						
PHYS 2371	3						
PHYS 2372	1						
CS 2800 and CS 2801	5						
CS 1210	1						
	18		0		0		0

<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
MATH 2321	4	Co-op	0	Co-op	0	PHYS 3600	4
CS 3000	4					PHYS 4305	4
MATH 2341	4						
Elective	4						
	16		0		0		8

<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 3800	4	Co-op	0	Co-op	0	Elective	4
Elective	4					Elective	4
PHYS 3602	4						
ENGW 3302	4						
THTR 1170	1						
	17		0		0		8

## Year 5

Fall	Hours	Spring	Hours
CS 4500	4	CS or PHYS capstone	4
MATH 4525	4	PHYS elective if CS capstone (CS elective if PHYS capstone)	4
PHYS elective	4	Elective	4
Computing and social issues	4	Elective	4
	16		16

Total Hours: 137

## Data Science and Physics, BS

The data science and physics combined major brings together computer and data science, physics, and mathematics. The computer science and mathematics requirements serve as a foundation for both data science and physics. From hands-on experience with sophisticated physics instruments, to mathematical theory, to the latest computational innovations, our interdisciplinary approach is designed to prepare students for the myriad challenges in today's rapidly changing world.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4

### Data Science Foundations

DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
<b>Computer Science Senior Seminar</b>		
THTR 1170	The Eloquent Presenter	1

### Physics Courses

Code	Title	Hours
<b>Required Courses</b>		
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 3603	Electricity and Magnetism 2	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 4115 or PHYS 5116	Quantum Mechanics I Complex Networks and Applications	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

### Electives

Code	Title	Hours
<b>Khoury Elective</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:		4
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Physics Elective</b>		
Complete one course not already required in the following range:		4
PHYS 3000 to PHYS 5999		

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		
ENGW 3302 or ENGW 3307	Advanced Writing in the Technical Professions Advanced Writing in the Sciences	4



or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Additional Mathematics Requirements</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

**Integrative Course and Capstone**

Code	Title	Hours
PHYS 5318	Principles of Experimental Physics	4

**Required General Electives**

Code	Title	Hours
Complete 16 credits of general electives.		16

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

135 total semester hours required

**Plan of Study**

Sample Patterns:

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	MATH 1342	4				

CS 2500 and CS 2501	5	PHYS 1165 and PHYS 1166 and PHYS 1167	5				
PHYS 1161 and PHYS 1162 and PHYS 1163	5	ENGW 1111	4				
MATH 1341	4						
		20	18	0	0		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	MATH 2341	4	CS 3200	4	Co-op	0
PHYS 2303	4	PHYS 3601	4	MATH 3081	4		
DS 3000	4	DS 4200	4				
MATH 2321	4	General elective	4				
		16	17	8	0		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHYS 3602	4	PHYS 3600	4	Co-op	
		PHYS 4305	4	PHYS 3603	4		
		DS 4300	4				
		General elective	4				
		0	16	8	0		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		DS 4400	4	Vacation		Co-op	
		PHYS 4115 or 5116	4				
		ENGW 3307	4				
		THTR 1170	1				
		Khoury elective	4				
		0	17	0	0		

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHYS 5318	4				
		PHYS XXXX advanced physics elective	4				
		General elective	4				
		General elective	4				
		0	16				

Total Hours: 136

## Four Years, Two Co-ops in Summer 2/Fall

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	MATH 2331	4	MATH 2341	4
CS 1800 and CS 1802	5	MATH 1342	4	General elective	4	General elective	4
CS 2500 and CS 2501	5	PHYS 1165 and PHYS 1166 and PHYS 1167	5				
PHYS 1161 and PHYS 1162 and PHYS 1163	5	ENGW 1111	4				
MATH 1341	4						
	20		18		8		8

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 1210	1	CS 3200	4	Co-op	0
DS 3000	4	DS 4200	4	MATH 3081	4		
PHYS 2303	4	ENGW 3307	4				
General elective	4	PHYS 3601	4				
		General elective	4				
	16		17		8		0

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHYS 3602	4	PHYS 3600	4	Co-op	
		PHYS 4305	4	PHYS 3603	4		
		DS 4300	4				
		Khoury elective	4				
		THTR 1170	1				
	0		17		8		0

### Year 4

Fall	Hours	Spring	Hours
Co-op		DS 4400	4
		PHYS 5318	4
		PHYS 4115 or 5116	4
		PHYS XXXX advanced physics elective	4
	0		16

Total Hours: 136

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	5
<i>Physics 2</i>		
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	5
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
PHYS 5318	Principles of Experimental Physics	4

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

### Music Requirements

Code	Title	Hours
<b>Music Theory and Composition</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4
Complete two of the following:		
MUSC 3541	Music Analysis Seminar	8

MUSC 2111	Algebra and Geometry of Music	
MUSC 3300	Music Perception and Cognition	
<b>Music in Context</b>		
MUSC 1001	Music in Everyday Life	4
<i>Contemporary</i>		
Complete one course from the following:		4
MUSC 2101	Black Popular Music	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2317	Punk Rock	
MUSC 2310	Popular Music Since 1945	
MUSC 2320	40,000 Years of Music Technology	
MUSC 2340	Divas, DJs, and Double Standards	
MUSC 2351	Music, Sound, and the Screen	
MUSC 3352	Sounding Human	
MUSC 3560	Topics in Music since 1900	
MUSI 3401	Hip Hop in the Music Industry	

<b>Music Technology</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4
MUST 1220	Introduction to Music Technology	4
MUST 2431	Computer Music Fundamentals	4

<b>Music Technology Electives</b>		
Complete two of the following:		8
MUSC 4510	Music and the Brain Research	
MUST 3540	Special Topics in Music Technology	
MUST 4610	Composition for Electronic Instruments	
MUST 4520	Interactive Music Programming	

<b>Music Technology Capstone</b>		
MUST 4611	Music Technology Capstone/Senior Recital	4

## Physics/Music Integrative Requirements

Code	Title	Hours
<b>Integrative Course Requirements</b>		
MUSC 2350	Acoustics and Psychoacoustics of Music	4

## Physics and Music Combined-Major Credit Requirement

Complete 98 semester hours in the major.

## Music Technology Major Grade Requirement

Students must maintain at least a 2.667 GPA (B- average) in the requirements of the music half of the combined major and also complete all required music courses with grades of at least C. Students who fail to meet the above standards will be placed on departmental probation; those who remain on probation for two consecutive semesters will be dropped from the major.

## Program Requirement

131 total semester hours required

## Plan of Study

### Note on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently.

Therefore, the suggested plan of study will vary from student to student, **depending on the year of entry for that student.**

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

## Five Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation		Vacation	
PHYS 1161	4	PHYS 1166	1				
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	MATH 1342	4				
MATH 1341	4	MUST 1220	4				
MUSC 1001	4	Elective	4				
ENGW 1111	4						
		18		17		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	PHYS 3602	4	Vacation		Vacation on ODD years. See offering schedule for even years	
MATH 2321	4	MATH 2341	4				
MUSC 1201	4	MUSC 1202	4				
Elective	4	MUSC 2350	4				
		16		16		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2371	3	Co-op		Co-op		PHYS 3600	4
PHYS 2372	1					PHYS 4305	4
MUST 2431	4						
Elective	4						
EESC 2000	1						
MUSC 3541, 2111, or 3300	4						
		17		0		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUSC 3541, 2111, or 3300	4	Co-op		Co-op		Vacation	
MUST 3540	4						
PHYS 4115	4						
Music elective	4						
		16		0		0	

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3307	4	PHYS 5318	4				
MUST 4610	4	MUST 4611	4				
Elective	4						

Elective	4	
	16	8

Total Hours: 132

### FOUR YEARS, ONE CO-OP IN SPRING/SUMMER 1

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 1000	1	PHYS 1165	4	Vacation		Vacation	
PHYS 1161	4	PHYS 1166	1				
PHYS 1162	1	PHYS 1167	0				
PHYS 1163	0	MATH 1342	4				
MATH 1341	4	MUST 1220	4				
MUSC 1001	4	Elective	4				
ENGW 1111	4						
	18		17		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	MATH 2341	4	Vacation		PHYS 3600	4
PHYS 2371	3	MUSC 1202	4			Elective in ODD years, PHYS 4305 in EVEN years	4
PHYS 2372 <sup>3</sup>	1	MUSC 2350	4				
MATH 2321	4	PHYS 3602	4				
MUSC 1201	4						
	16		16		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MUST 2431	4	Co-op		Co-op		ENGW 3307	4
MUSC 3541, 2111, or 3300	4					PHYS 4305 (in EVEN years, Elective in ODD years.)	4
Music elective	4						
PHYS 4115	4						
EESC 2000	1						
	17		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
MUSC 3541, 2111, or 3300	4	PHYS 5318	4
MUST 3540	4	MUST 4611	4
MUST 4610	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 132

### Offerings schedule (subject to changes)

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall

- PHYS 3600 offered every summer 1 and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (**take in yr. 2 or 3, whichever is even**)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

### Physics and Philosophy, BS

The combined major in physics and philosophy provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students with an understanding of the methods and traditions of philosophical thought, as well as with opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Students will be able to describe the method by which physical "law" is made manifest in the sciences, how this knowledge compares with other epistemological models studied in other contexts, and philosophical views on the status and source of physical "law."

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following: 5		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		

Complete one of the following: 5

PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

**Intermediate Physics**

PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4

**Advanced Physics**

PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

**Physics Elective**

Complete one of the following: 4

MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 5111	Astrophysics and Cosmology	
PHYS 5113	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	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 4500	Theory of Knowledge	4
or PHIL 2050	Information and Uncertainty	

**Philosophy Advanced Elective**

Complete two of the following (not used to fulfill another requirement): 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	

PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete three PHIL courses. 12

**Physics/Philosophy Integrative Requirements**

Code	Title	Hours
<b>Integrative Course Requirements</b>		
PHIL 4510	Philosophy of Science	4
PHYS 3601	Classical Dynamics	4

**Breadth Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

**Physics and Philosophy Major Credit Requirement**

Complete 98 semester hours in the major.

**Program Requirement**

132 total semester hours required

**Plan of Study****Notes on Physics Plans of Study**

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic advisor for additional information and plans of study.

**Even-Numbered Year One****FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	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				
ENGW 1111	4						
	18		17		0		0

Year 2						Year 3									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	MATH 2341	4	Vacation	0	Co-op	0	Co-op	0	PHYS 4115	4	ENGW 3307	4	Co-op	0
PHYS 2371	3	PHIL elective	4							PHYS elective	4	Elective	4		
PHYS 2372	1	PHIL elective	4							PHIL 4500	4				
MATH 2321	4	EESC 2000	1							PHIL 4510	4				
PHIL 2330	4	PHYS 3601	4							0	16	8	0		
	16		17		0		0								
Year 3						Year 4									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHYS 4115	4	PHYS 3600	4	Co-op	0	Co-op	0	PHYS 4305	4				
		PHYS elective	4	Elective	4					PHIL advanced elective	4				
		PHIL 4500	4							Elective	4				
		PHIL elective	4							Elective	4				
	0		16		8		0		0		16				
Year 4						Year 5									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHYS 3602	4	Elective	4	Co-op	0	Co-op	0	PHYS 4305	4				
		PHIL 4510	4	Elective	4					PHIL advanced elective	4				
		PHIL elective	4							Elective	4				
		ENGW 3307	4							Elective	4				
	0		16		8		0		0		16				
Total Hours: 132						Total Hours: 132									

**OFFERING SCHEDULE (SUBJECT TO CHANGES)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Chemical Engineering and Physics, BSCE**

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. 46).

**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	4	PHIL 2330	4				
ENGW 1111	4						
	18		17		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	PHYS 3601	4	PHYS 3600	4	Co-op	0
PHYS 2371	3	PHYS 3602	4	Elective	4		
PHYS 2372	1	PHIL elective	4				
PHIL elective	4	PHIL elective	4				
PHIL elective	4	EESC 2000	1				
	16		17		8		0



## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

## Engineering

Code	Title	Hours
<b>Required Engineering</b>		
CHME 2308	Conservation Principles in Chemical Engineering	4
CHME 2310	Transport Processes 1	4
CHME 2320	Chemical Engineering Thermodynamics 1	4
CHME 3312	Transport Processes 2 and Separations	4
CHME 3315 and CHME 3316	Chemical Engineering Experimental Design 1 and Recitation for CHME 3315	4
CHME 3322	Chemical Engineering Thermodynamics 2	4
CHME 4315 and CHME 4316	Chemical Engineering Experimental Design 2 and Recitation for CHME 4315	4
CHME 4510	Chemical Engineering Kinetics	4
PHYS 3600	Advanced Physics Laboratory	4
<b>Chemical Engineering Capstone</b>		
CHME 4701	Capstone Design 1: Process Analysis	4
CHME 4703 and CHME 4705	Capstone Design 2: Chemical Process Design and Recitation for CHME 4703	4
<b>Advanced Engineering Elective</b>		
Complete one course numbered between 4000 and 5999 in any of the following subject areas:		4
CHME, CIVE, EECE, ME, IE, MEIE, and ENGR		
<b>Supplemental Credit</b>		
2 semester hours from the following course count toward the engineering requirement:		2
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	

## Mathematics/Science Requirement

Complete all Mathematics/Science courses with a minimum of 30 semester hours.

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	5
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 5318	Principles of Experimental Physics	4

### Supplemental Credit

1 semester hour from the following course counts toward the mathematics/science requirement:		1
GE 1501	Cornerstone of Engineering 1	

## Advanced Science Requirement

Code	Title	Hours
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
PHYS 2303	Modern Physics	4
PHYS 4115	Quantum Mechanics I	4
Complete one of the following:		5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	
CHEM 2317 and CHEM 2318	Organic Chemistry 2 for Chemistry Majors and Lab for CHEM 2317	

## Professional Development

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

### Additional Required Courses

1 semester hour from the following course counts toward the professional development requirement:		1
GE 1501	Cornerstone of Engineering 1	
1 semester hour from the following course counts toward the professional development requirement:		1
GE 1502	Cornerstone of Engineering 2	

## Writing Requirements

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
	Complete 8 SH of academic, nonremedial, nonrepetitive courses.	8

### Major GPA Requirement

2.000 minimum required in CHME courses

### Program Requirement

139 total semester hours required

### Plan of Study

#### Four Years, One Co-op in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CHME 2308	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4	PHYS 1155 (ND)	4		3
ENGW 1111 (WF)	4	MATH 1342 (FQ)	4	PHYS 1156 (AD)	4		1
GE 1000	1	PHYS 1151 (ND)	3	PHYS 1157	3		1
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		9		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311	4	CHEM 2313	4	General Elective (to be taken online)	4	Vacation	0
CHEM 2312	1	CHEM 2314	1				
CHME 2320	4	CHME 2310	4				
MATH 2341	4	CHME 3322	4				
PHYS 2371 (ND)	3	PHYS 2303 (ND)	4				
PHYS 2372 (EI)	1						
	17		17		4		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHME 3312	4	CHME 4315 (AD, WI)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
CHME 3315 (AD)	4	CHME 4316	0	General Elective	4		
CHME 3316	0	CHME 4510	4				
ENGW 3302 or 3315 (WD)	4	CHME 4701	4				
Advanced Engineering Elective	4	ENCP 2000	1				
		PHYS 3601 (ND)	4				
	16		17		8		0

Year 4			
Fall	Hours	Spring	Hours
Co-op	0	CHME 4703 (EI, CE, WI)	4
		CHME 4705	0
		ENCP 3000	1
		PHYS 3602 (ND)	4
		PHYS 4115 (ND, FQ)	4
		PHYS 5318 (ND, AD, WI, CE)	4
	0		17

Total Hours: 139

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	CHME 2308	4	MATH 2321 (FQ)	4	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4	PHYS 1155 (ND)	4		3
ENGW 1111 (WF)	4	MATH 1342 (FQ)	4	PHYS 1156 (AD)	4		1
GE 1000	1	PHYS 1151 (ND)	3	PHYS 1157	3		1
GE 1501	4	PHYS 1152 (AD)	1				
MATH 1341 (FQ)	4	PHYS 1153	1				
	17		17		9		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 2311	4	CHEM 2313	4	General Elective (to be taken online)	4	Co-op	0
CHEM 2312	1	CHEM 2314	1				
CHME 2320	4	CHME 2310	4				
MATH 2341	4	CHME 3322	4				
PHYS 2371 (ND)	3	ENCP 2000	1				
PHYS 2372 (EI)	1	PHYS 2303 (ND)	4				
	17		18		4		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 3312	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
		CHME 3315 (AD)	4	General Elective	4		
		CHME 3316	0				
		ENGW 3302 or 3315 (WD)	4				

	PHYS 3601 (ND)	4		
	0	16	8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CHME 4315	4	Vacation	0	Co-op	0
		CHME 4316	0				
		CHME 4510	4				
		CHME 4701	4				
		ENCP 3000	1				
		PHYS 3602 (ND)	4				
	0		17		0		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CHME 4703 (EI, CE, WI)	4
		CHME 4705	0
		PHYS 4115 (ND, FQ)	4
		PHYS 5318 (ND, AD, WI, CE)	4
		Advanced Engineering Elective	4
	0		16

Total Hours: 139

## Computer Engineering and Physics, BSCompE

This intercollege combined major serves students who would like to explore their interest in physics while earning the benefit of an accredited Bachelor of Science degree in engineering. The dual major combines a major in physics from the Department of Physics in the College of Arts and Sciences with the Bachelor of Science in Computer Engineering degree from the Department of Electrical and Computer Engineering.

Because of the large body of shared knowledge between computer engineering and physics, an integrated dual major between these two disciplines is a logical course of study and can be accomplished within a student's usual five-year program (including three co-op placements) without requiring course overloading in any semester. A student graduating from this program will have studied both the physical fundamentals and computer systems.

Students interested in this program should contact the Department of Electrical and Computer Engineering or the Department of Physics as early as possible, preferably prior to registering for freshman courses.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements through general electives.

### Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Computer Engineering Fundamentals</b>		
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	5
EECE 2540	Fundamentals of Networks	4
EECE 2560	Fundamentals of Engineering Algorithms	4

### 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 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

### Computer Engineering Capstone Courses

EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4

### Technical Electives

Students can register for EECE 4991 / EECE 4992 / EECE 4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.

Complete two of the following:	8
EECE 2412 to EECE 2530	
EECE 2750	Enabling Engineering
EECE 3324 to EECE 4698	
EECE 4991	Research
EECE 4992	Directed Study
EECE 4993	Independent Study
EECE 5155 to EECE 5698	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage

GE 4608	Introduction to Nanotechnology in Engineering
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One CS/CY/IS course from the following approved list may be taken toward the EECE technical elective requirement:

CS 3200	Database Design
CS 3500	Object-Oriented Design
CS 3540 to CS 3800	
CS 4100 to CS 4770	
CS 4850	Building Game Engines
CY 2550	Foundations of Cybersecurity
IS 4200 to IS 4700	

**Supplemental Credit**

2 semester hours from the following course count toward the engineering requirement: 2

GE 1501	Cornerstone of Engineering 1
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3 semester hours from the following course count toward the engineering requirement: 3

GE 1502	Cornerstone of Engineering 2
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**Mathematics/Science**

Code	Title	Hours
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**Required Mathematics/Science**

CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4

Complete one of the following: 5

PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
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PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
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Complete one of the following: 5

PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
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PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	
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PHYS 2303	Modern Physics	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4

**Advanced Physics Elective**

Complete one of the following: 4

MATH 4606	Mathematical and Computational Methods for Physics
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PHYS 3600 to PHYS 7999

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1
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**Professional Development**

Code	Title	Hours
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**Required Professional Development**

GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2
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**Writing Requirements**

Code	Title	Hours
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**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	

**Required General Electives**

Code	Title	Hours
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Complete 8 SH of academic, nonremedial, nonrepetitive courses. 8

**Integrative Requirement**

The following course, which counts toward the engineering requirement above, is an integrative course:

Code	Title	Hours
EECE 4790	Electrical and Computer Engineering Capstone 1	4

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**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
	CHEM 1151 (ND)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0

724 Electrical Engineering and Physics, BSEE

CHEM 1153	0	MATH 1342 (FQ)	4
GE 1000	1	PHYS 1165 (ND)	4
GE 1501	4	PHYS 1166 (AD)	1
MATH 1341 (FQ)	4	PHYS 1167	0
PHYS 1161 (ND)	4	ENGW 1111	4
PHYS 1162 (AD)	1		
PHYS 1163	0		
	18	17	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EECE 2160	4	CS 1800 (FQ)	4	Vacation	0	Co-op	0
MATH 2321 (FQ)	4	CS 1802	1				
MATH 2341	4	EECE 2150 (AD)	5				
PHYS 2303 (ND)	4	ENCP 3000	1				
		PHYS 3602 (ND)	4				
		CE Fundamentals	4				
	16		19		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3302 or 3315 (WD)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
		PHYS 4115 (ND, FQ)	4	General Elective	4		
		CE Fundamentals	5				
		EE Fundamentals	4				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	EECE 4790 (EI, WI, CE)	4	Co-op	0
		MATH 3081 (AD)	4	EECE Technical Elective	4		
		PHYS 4305 (ND)	4				
		CE Fundamentals	4				
		General Elective	4				
	0		17		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	EECE 4792 (EI, WI, CE)	4
		EECE Technical Elective	4
		PHYS Advanced Elective	4
	0		12

Total Hours: 132

Notes on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

**PHYSICS COURSES OFFERING SCHEDULE (SUBJECT TO CHANGES)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering

Code	Title	Hours
<b>Required Courses</b>		
EECE 2150	Circuits and Signals: Biomedical Applications	5
EECE 2160	Embedded Design: Enabling Robotics	4
<b>Electrical Engineering Fundamentals</b>		
EECE 2412 and EECE 2413	Fundamentals of Electronics and Lab for EECE 2412	5
EECE 2520	Fundamentals of Linear Systems	4
EECE 2530 and EECE 2531	Fundamentals of Electromagnetics and Lab for EECE 2530	5
<b>Computer Engineering Fundamentals</b>		
If more than one computer engineering fundamentals course is taken, it can count as a technical elective.		
Complete one of the following:		4-5
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
EECE 2540	Fundamentals of Networks	
EECE 2560	Fundamentals of Engineering Algorithms	
<b>Electrical Engineering Capstone Courses</b>		
EECE 4790	Electrical and Computer Engineering Capstone 1	4
EECE 4792	Electrical and Computer Engineering Capstone 2	4
<b>EECE Technical Electives</b>		
Students can register for EECE4991/EECE4992/EECE4993 more than once. For these courses combined, a maximum of 8SH credits will be allowed to satisfy the requirement of technical electives. An additional 4SH of credits will be allowed as a general elective. At most one of these courses (4SH) can be taken in a semester.		
Complete two of the following:		8-9

EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322
EECE 2540 to EECE 2750	
EECE 3324 to EECE 3410	
EECE 4512 to EECE 4698	
EECE 4991	Research
EECE 4992	Directed Study
EECE 4993	Independent Study
EECE 5155 to EECE 5698	
ENGR 5670	Sustainable Energy: Materials, Conversion, Storage, and Usage
GE 4608	Introduction to Nanotechnology in Engineering

Supplemental Credit	
2 semester hours from the following course count toward the engineering requirement:	2
EECE 3468	Noise and Stochastic Processes
2 semester hours from the following course count toward the engineering requirement:	2
GE 1501	Cornerstone of Engineering 1
3 semester hours from the following course count toward the engineering requirement:	3
GE 1502	Cornerstone of Engineering 2

### Mathematics/Science

Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
Complete one of the following:		5
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	
Complete one of the following:		5
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	
PHYS 2303	Modern Physics	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4



**Advanced Physics Elective**

Complete one of the following: 4

MATH 4606	Mathematical and Computational Methods for Physics
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PHYS 3600 to PHYS 7999

**Supplemental Credit**

2 semester hours from the following course count toward the mathematics/science requirement: 2

EECE 3468	Noise and Stochastic Processes
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1 semester hour from the following course counts toward the mathematics/science requirement: 1

GE 1501	Cornerstone of Engineering 1
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**Professional Development**

Code	Title	Hours
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**Required Professional Development**

GE 1000	Introduction to the Study of Engineering	1
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ENCP 2000	Introduction to Engineering Co-op Education	1
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ENCP 3000	Professional Issues in Engineering	1
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**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement: 1

GE 1501	Cornerstone of Engineering 1
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1 semester hour from the following course counts toward the professional development requirement: 1

GE 1502	Cornerstone of Engineering 2
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**Writing Requirement and NUPath Courses**

Code	Title	Hours
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**Writing**

A grade of C or higher is required:

ENGW 1111	First-Year Writing	4
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ENGW 3302	Advanced Writing in the Technical Professions	4
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or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
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**Required General Electives**

Code	Title	Hours
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Complete 12 SH of academic, nonremedial, nonrepetitive courses. 12

**Major GPA Requirement**

2.000 minimum GPA required in EECE courses

**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
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ENGW 1111 (WF)	4	GE 1502 (ER)	4	Vacation	0	Vacation	0
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GE 1000	1	MATH 1342 (FQ)	4				
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GE 1501	4	PHYS 1165 (ND)	4
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MATH 1341 (FQ)	4	PHYS 1166 (AD)	1
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PHYS 1161 (ND)	4	PHYS 1167	0
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PHYS 1162 (AD)	1	CHEM 1151 and CHEM 1153	4
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PHYS 1163	0		
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18	17	0	0
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**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
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EECE 2150 (AD)	5	EECE 2160	4	Vacation	0	Co-op	0
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MATH 2321 (FQ)	4	ENCP 2000	1				
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MATH 2341	4	PHYS 3602 (ND)	4				
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PHYS 2303 (ND)	4	EE Fundamental:	4				
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General Elective	4						
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17	17	0	0
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**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
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Co-op	0	ENGW 3302 or 3315 (WD)	4	PHYS 3600 (ND, AD, WI)	4	Co-op	0
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PHYS 4115 (ND, FQ)	4	General Elective	4				
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CE Fundamentals	4						
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EE Fundamental:	5						
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0	17	8	0
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**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
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Co-op	0	EECE 3468	4	EECE 4790 (EI, WI, CE)	4	Co-op	0
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ENCP 3000	1	EECE Technical Elective	4				
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PHYS 4305 (ND)	4						
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EE Fundamental:	5						
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EECE Technical Elective	4						
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0	18	8	0
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**Year 5**

Fall	Hours	Spring	Hours
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Co-op	0	EECE 4792 (EI, WI, CE)	4
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PHYS Advanced Elective	4		
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General Elective	4
General Elective	4
0	16

Total Hours: 136

### Notes on Physics courses in Plans of Study

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic adviser for additional information and plans of study.

### Physics courses offering schedule (subject to changes)

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

### 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD) are not satisfied by required engineering courses. Students are responsible for satisfying these requirements with general electives.

### Engineering Requirement

Code	Title	Hours
<b>Required Engineering</b>		
ME 2340 and ME 2341	Introduction to Material Science and Lab for ME 2340	5
ME 2350	Statics	4
ME 2355 and ME 2356	Mechanics of Materials and Lab for ME 2355	5
ME 2380 and ME 2381	Thermodynamics and Recitation for ME 2380	4
ME 3455 and ME 3456	Dynamics and Lab for ME 3455	5
ME 3475 or ME 3480	Fluid Mechanics International Applications of Fluid Mechanics	4
ME 4505 and ME 4506	Measurement and Analysis with Thermal Science Application and Lab for ME 4505	5
ME 4508	Mechanical Engineering Computation and Design	4
ME 4550	Mechanical Engineering Design	4
ME 4555	System Analysis and Control	4
ME 4570	Thermal Systems Analysis and Design	4
<b>Mechanical Engineering Capstone</b>		
MEIE 4701	Capstone Design 1	1
MEIE 4702	Capstone Design 2	5
<b>Supplemental Credit</b>		
	2 semester hours from the following course counts toward the engineering requirement:	2
GE 1501	Cornerstone of Engineering 1	
	3 semester hours from the following course counts toward the engineering requirement:	3
GE 1502	Cornerstone of Engineering 2	
<b>Mathematics/Science Requirement</b>		
Code	Title	Hours
<b>Required Mathematics/Science</b>		
CHEM 1151 and CHEM 1153	General Chemistry for Engineers and Recitation for CHEM 1151	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
PHYS 1161 and PHYS 1162 and PHYS 1163	Physics 1 and Lab for PHYS 1161 and Recitation for PHYS 1161	5
PHYS 1165 and PHYS 1166 and PHYS 1167	Physics 2 and Lab for PHYS 1165 and Recitation for PHYS 1165	5
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3601	Classical Dynamics	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 5318	Principles of Experimental Physics	4

**Advanced Physics Elective**

Complete one 4 semester hour course from the below list:	4
PHYS 4606	Mathematical and Computational Methods for Physics
PHYS 4621	Biological Physics 1
PHYS 4623	Medical Physics
PHYS 4651	Medical Physics Seminar 1
PHYS 4652	Medical Physics Seminar 2
PHYS 5111	Astrophysics and Cosmology
PHYS 5113	Introduction to Particle and Nuclear Physics
PHYS 5114	Physics of Advanced Materials
PHYS 5116	Complex Networks and Applications
PHYS 5260	Introduction to Nanoscience and Nanotechnology

**Supplemental Credit**

1 semester hour from the following course counts toward the mathematics/science requirement:	1
GE 1501	Cornerstone of Engineering 1

**Professional Development**

Code	Title	Hours
<b>Professional Development</b>		
GE 1000	Introduction to the Study of Engineering	1
ENCP 2000	Introduction to Engineering Co-op Education	1
ENCP 3000	Professional Issues in Engineering	1

**Additional Required Courses**

1 semester hour from the following course counts toward the professional development requirement:	1
GE 1501	Cornerstone of Engineering 1
1 semester hour from the following course counts toward the professional development requirement:	1
GE 1502	Cornerstone of Engineering 2

**Writing Requirements**

Code	Title	Hours
<b>Writing</b>		
A grade of C or higher is required:		
ENGW 1111	First-Year Writing	4
ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 8SH of academic, nonremedial, nonrepetitive courses.		8

**Integrative Requirement**

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

**Major GPA Requirement**

2.000 minimum GPA required in IE, ME, and MEIE courses

**Program Requirement**

139 total semester hours required

**Plan of Study****FOUR YEARS, ONE CO-OP IN SUMMER 2 / FALL****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1	4	ENGW 1111 (WF)	4	Vacation	0	Vacation	0
CHEM 1151 (ND)	4	GE 1502 (ER)	4				
CHEM 1153	0	MATH 2321 (FQ)	4				
GE 1000	1	PHYS 1165 (ND)	4				
GE 1501	4	PHYS 1166 (AD)	1				
MATH 1342 (FQ)	4	PHYS 1167	0				
PHYS 1161 (ND)	4						
PHYS 1162 (AD)	1						
	22		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2341	4	ME 2340 (WI)	4	ME 3475	4	Vacation	
ME 2350	4	ME 2341	1	PHYS 3600 (ND, AD, WI)	4		
ME 2380	4	ME 2355	4				
ME 2381	0	ME 2356	1				
PHYS 2303 (ND)	4	PHYS 3601 (ND)	4				
		General Elective	4				
	16		18		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3302 or 3315 (WD)	4	ENCP 2000	1	ME 4550	4	Co-op	0
ME 4505 (AD)	4	ME 3455	4	MEIE 4701 (EI, CE, WI)	1		
ME 4506	1	ME 3456	1				
PHYS 2371 (ND)	3	ME 4508	4				
PHYS 2372 (EI)	1	ME 4570	4				

General Elective	4	PHYS 3602 (ND)	4		
	17		18	5	0

**Year 4**

Fall	Hours	Spring	Hours	Hours	Hours
Co-op	0	ENCP 3000	1		
		ME 4555	4		
		MEIE 4702 (EI, CE, WI)	5		
		PHYS 5318 (ND, AD, WI, CE)	4		
		Advanced Physics Elective	4		
	0		18		

Total Hours: 139

**FIVE YEARS, THREE CO-OPS IN SUMMER 2 / FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CHEM 1151 (ND)	4	ENGW 1111 (WF)	4	Vacation	0	Vacation	0
CHEM 1153	0	GE 1502 (ER)	4				
GE 1000	1	MATH 1342 (FQ)	4				
GE 1501	4	PHYS 1165 (ND)	4				
MATH 1341 (FQ)	4	PHYS 1166 (AD)	1				
PHYS 1161 (ND)	4						
PHYS 1162 (AD)	1						
	18		17	0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321 (FQ)	4	ENCP 2000	1	Vacation	0	Co-op	0
MATH 2341	4	ME 2340 (WI)	4				
ME 2350	4	ME 2341	1				
PHYS 2371 (ND)	3	ME 2355	4				
PHYS 2372 (EI)	1	ME 2356	1				
		ME 2380	4				
		ME 2381	0				
		PHYS 2303 (ND)	4				
	16		19	0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3302 or 3315 (WD)	4	ME 3475	4	Co-op	0
		ME 3455	4	PHYS 3600 (ND, AD, WI)	4		

		ME 3456	1		
		ME 4508	4		
		PHYS 3602 (ND)	4		
	0		17	8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENCP 3000	1	ME 4550	4	Co-op	0
		ME 4505 (AD)	4	MEIE 4701 (EI, WI, CE)	1		
		ME 4506	1	General Elective	4		
		ME 4555	4				
		ME 4570	4				
		PHYS 3601 (ND)	4				
	0		18	9		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	MEIE 4702 (EI, WI, CE)	5
		PHYS 5318 (ND, AD, CE, WI)	4
		Advanced Physics Elective	4
		General Elective	4
	0		17

Total Hours: 139

**Notes:**

- PHYS 2303 offered every fall, spring and summer 2.
- PHYS 2371/2372 offered every fall.
- PHYS 3600 offered every summer 1 and summer 2.
- Classical Dynamics (PHYS 3601) is offered fall and spring semesters of even years only. Please meet with an academic advisor to discuss scheduling options for Year 4 of odd years.
- PHYS 3602 offered every fall and spring.
- PHYS 3603 offered fall (even years) and summer 1 (odd years).
- PHYS 4115 offered every fall and spring.
- PHYS 4305 offered every spring and summer 2 (even years).
- PHYS 4621 offered spring (odd years) and fall (even years).
- PHYS 4623 offered summer 1 and fall (even years).
- PHYS 4651 offered spring and fall (odd years).
- PHYS 4652 offered every spring.
- PHYS 5318 offered every spring.
- Advanced physics electives: **PHYS 4606, PHYS 4621, PHYS 4623, PHYS 4651, PHYS 4652, PHYS 5111, PHYS 5113, PHYS 5114, PHYS 5116, PHYS 5260.**

## Physics, Minor

The physics minor provides a foundation in classical and modern physics and allows students to explore more advanced topics in physics through elective choices.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Complete one of the following sequences:		10
<b>Physics 1 and 2</b>		
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
<b>Physics for Engineering 1 and 2</b>		
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	

### Modern Physics

Code	Title	Hours
PHYS 2303	Modern Physics	4

### Elective Courses

Code	Title	Hours
Complete two of the following:		8
MATH 4606	Mathematical and Computational Methods for Physics	
PHYS 2300 to PHYS 5999		

### GPA Requirement

2.000 GPA required in the minor

## Psychology

Website (<http://www.northeastern.edu/psychology/>)

**Peter Bex, PhD**  
Professor and Chair

125 Nightingale Hall  
617.373.3076  
617.373.8714 (fax)

Studies in modern psychology focus on mind, brain, and behavior. Based on empirical research with both humans and animals, psychologists investigate and seek explanations for the behavior and mental life of individuals, develop assessment tools and treatment options for

addressing clinical problems, and test applications of psychology in a broad range of contexts.

The psychology curriculum explores such topics as how brain function determines behavior; how we see, hear, and learn; what constitutes personality; the nature of language and cognitive processing; how emotions affect behavior; how individuals work in groups; the efficacy of a range of therapeutic techniques; and how principles of psychology apply to educational, medical, and other settings. Through laboratory practice and experimentation, individual research projects, and small-group seminars, the program provides the opportunity for critical evaluation and in-depth exploration across the diverse topic areas that constitute modern psychology.

Students are eligible for directed study courses, which are individualized research experiences under the supervision of a faculty member. The department also offers honors sections of various courses. Co-op placements are varied and include both community (often mental health) and laboratory settings, depending on a student's interests.

A solid scientific background in psychology helps prepare students for academic careers in teaching and research, as well as professional careers in business, public and social services, education, mental health, law, and medicine. It also provides a strong foundation for graduate study in all areas of psychology, including clinical programs and programs in experimental and applied psychology.

*Note:* A double major in psychology and behavioral neuroscience is not offered due to the similarity in the course curricula of these majors.

### Programs

#### Bachelor of Science (BS)

- Psychology (p. 730)
- American Sign Language and Psychology (p. 735)
- Business Administration and Psychology (p. 268)
- Computer Science and Cognitive Psychology (p. 331)
- Criminal Justice and Psychology (p. 741)
- Data Science and Psychology (p. 411)
- Economics and Psychology (p. 744)
- Health Science and Psychology (p. 530)
- Linguistics and Psychology (p. 626)
- Mathematics and Psychology (p. 699)
- Psychology and Music (p. 228)

### Minor

- Psychology (p. 754)

## Psychology, BS

The Bachelor of Science degree program in psychology is designed to provide a research-based undergraduate education for students with a broad range of interests in basic and applied psychology. Psychology majors engage in academic course work and other experiences that span the breadth of psychology, as well as in-depth explorations that meet their own specific interests. Students have an opportunity to take fundamental and advanced courses spanning biological psychology, cognition, social psychology, personality psychology, sensation and perception, clinical psychology, applied psychology, learning and motivation, developmental psychology, and other subfields of psychology. By its very nature, psychology is a wide-ranging, cross-cutting field of study, and we encourage and offer interdisciplinary explorations via a highly flexible interdisciplinary cluster of courses that counts toward the BS curriculum,

strong ties to other departments and programs, and experiential education to enhance the learning process, including conducting research in faculty laboratories and participation in Northeastern's co-op program.

### Academic Progression Standards

Students who fail to maintain a minimum grade-point average of 2.000 will be placed on probation. Three consecutive academic terms on probation will result in dismissal from the major.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Psychology Major Requirements

Code	Title	Hours
<b>Introductory Course</b>		
PSYC 1101	Foundations of Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Complete two of the following:		8
PSYC 3450	Learning and Motivation	
or PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Statistics</b>		
PSYC 2320	Statistics in Psychological Research	4
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	

PSYC 4678	Seminar in Social and Affective Neuroscience
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### Lab Requirement

Complete two psychology lab courses OR one psychology lab course and one psychology directed study research or honors thesis: 8

#### Lab

PSYC 4600	Laboratory in Research Design
PSYC 4606	Laboratory in Biological Psychology
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4614	Laboratory in Social Psychology
PSYC 4616	Laboratory in Personality
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4624	Laboratory in Affective Science
PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

#### Directed Study Research or Honors Thesis

PSYC 4991	Directed Study Research
or PSYC 4971	Junior/Senior Honors Project 2

### Psychology Required Electives

Code	Title	Hours
Complete five PSYC courses.		20

### Supporting Courses

#### INTERDISCIPLINARY CLUSTER

Code	Title	Hours
Complete three of the following courses. Choose from one group only. Students may petition to create their own interdisciplinary cluster.		11-15

#### Educational Psychology

SOCL 1290	Juvenile Delinquency
EDUC 4530	Race and Urban Education
EDUC 5570	Inclusion, Equity, and Diversity
EDUC 1111	Education in the Community
EDUC 5503	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 Perspective
ANTH 2315	Religion and Modernity
LING 3412	Language and Culture
SOCL 1241	Violence and Society
SOCL 1255	Sociology of the Family
SOCL 1260	Gender in a Changing Society
SOCL 1290	Juvenile Delinquency
SOCL 1295	Drugs and Society

#### Forensic Psychology

CHEM 1107	Introduction to Forensic Science
CRIM 2200	Criminology
CRIM 4010	Gender, Crime, and Justice



CRIM 4020	Race, Crime, and Justice
<b>Cross-Cultural Psychology</b>	
ANTH 1101	Peoples and Cultures
LING 3412	Language and Culture
LING 3442	Sociolinguistics
<b>Expressive Therapy</b>	
MUSC 1118	Music Therapy 1
THTR 1130	Introduction to Acting
ARTF 1121	Conceptual Drawing
<b>Counseling and Applied Psychology</b>	
CAEP 3480	Counseling Theories and Practice
CAEP 3485	Mental Health and Counseling
HUSV 2300	Counseling in Human Services
HUSV 3520	Child Intervention and Treatment
<b>Artificial Intelligence and Information Science</b>	
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
<b>Language</b>	
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
<b>Human Factors</b>	
IS 2000	Principles of Information Science
IS 3500	Information System Design and Development
IS 4200	Information Retrieval
IS 4300	Human Computer Interaction
IS 4800	Empirical Research Methods
<b>Child and Adolescent Abnormal Psychology</b>	
CRIM 3200	Youth Crime and Justice
HUSV 3520	Child Intervention and Treatment
HUSV 3580	Sexual Violence: Counseling, Programs, and Policy
SOCL 1290	Juvenile Delinquency
SOCL 1295	Drugs and Society
<b>Human Resource Management and Business</b>	
ORGB 3201	Organizational Behavior
INTB 3310	Cultural Aspects of International Business
MISM 2301	Management Information Systems
MKTG 2209	Introduction to Marketing
PHIL 1170	Business Ethics
SOCL 1280	The Twenty-First-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
<b>Ethics</b>	
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
<b>Biological and Chemical Sciences</b>	
BIOL 1141	Microbes and Society
BIOL 1147	The Human Organism
BIOL 1149	Biology of Human Reproduction
EEMB 1450	Introduction to Marine Biology
CHEM 1101 and CHEM 1102	General Chemistry for Health Sciences and Lab for CHEM 1101
CHEM 1104 and CHEM 1105	Organic Chemistry for Health Sciences and Lab for CHEM 1104
CHEM 1211 and CHEM 1212	General Chemistry 1 and Lab for CHEM 1211
CHEM 1214 and CHEM 1215	General Chemistry 2 and Lab for CHEM 1214
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113
BIOL 1117	and
BIOL 1118	and
BIOL 1119 and BIOL 1120	and
BIOL 3403	Animal Behavior
BIOL 3405	Neurobiology
EEMB 2302	Ecology
BIOL 5585	Evolution
CHEM 1107	Introduction to Forensic Science
<b>Physical Sciences and Mathematics</b>	
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 4581	Statistics and Stochastic Processes
or any PHYS course	
<b>Health and Wellness</b>	
NRSG 1205	Wellness
HSCI 1105	Human Nutrition
HSCI 1106	Contemporary Issues in Nutrition
HSCI 5230	Clinical Nutrition Applications in Health and Disease

BIOL 1117	and
and BIOL 1119	
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 Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

**BS in Psychology Major Credit Requirements**

Complete 68 semester hours in the major. A maximum of 34 semester hours of transfer credit is allowed in the major. *Note:* Up to 12 semester hours of psychology-related electives will count toward the major *only after* the “Interdisciplinary Cluster” section has been completed.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
PSYC 1101	4	PSYC area A elective	4	Vacation	0	Vacation
ENGW 1111	4	PSYC elective	4			
Math requirement	4	Elective	4			
PSYC 1214 (or other PSYC elective)	4	Elective	4			
PSYC 1000	1					
		17			16	0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
PSYC 2320	4	PSYC area A elective	4	Vacation	0	Co-op
PSYC area B elective	4	PSYC area B elective	4			
Elective	4	PSYC interdisciplinary cluster	4			
Elective	4	Elective	4			
		EESC 2000	1			
		16			17	0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	PSYC elective	4	Elective	4	Co-op
		PSYC lab elective	4	Elective	4	
		ENGW 3315	4			
		Elective	4			
		0			16	8
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	PSYC lab elective	4	Elective	4	Co-op
		PSYC elective	4	Elective	4	
		PSYC interdisciplinary cluster	4			
		Elective	4			
		0			16	8
Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op	0	PSYC seminar elective	4			

PSYC interdisciplinary cluster	4
PSYC elective	4
Elective	4
<b>0</b>	<b>16</b>

Total Hours: 130

### Five Years, Three Co-ops in Spring/Summer 1

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC area A elective	4	Vacation	0	Vacation	0
ENGW 1111	4	PSYC elective	4				
Math requirement	4	Elective	4				
PSYC 1214 (or other PSYC elective)	4	Elective	4				
PSYC 1000	1						
<b>17</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Co-op	0	Co-op	0	Elective	4
PSYC area B elective	4					Elective	4
Elective	4						
Elective	4						
EESC 2000	1						
<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC area A elective	4	Co-op	0	Co-op	0	Elective	4
PSYC area B elective	4					Elective	4
ENGW 3315	4						
Elective	4						
<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC lab elective	4	Co-op	0	Co-op	0	Vacation	0
PSYC elective	4						
PSYC interdisciplinary cluster	4						
Elective	4						
<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Year 5**

Fall	Hours	Spring	Hours
PSYC lab elective	4	PSYC seminar elective	4
PSYC elective	4	PSYC elective	4
PSYC interdisciplinary cluster	4	PSYC interdisciplinary cluster	4
Elective	4	Elective	4
<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>

Total Hours: 130

### Four Years, Two Co-ops in Summer 2/Fall

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC area A elective	4	PSYC elective	4	Vacation	4
ENGW 1111	4	PSYC elective	4	Elective	4		
Math requirement	4	Elective	4				
PSYC 1214 (or other PSYC elective)	4	Elective	4				
PSYC 1000	1						
<b>17</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	PSYC area A elective	4	Elective (or AP credit, etc.)	4	Co-op	4
PSYC area B elective	4	PSYC area B elective	4	Elective (or AP credit, etc.)	4		
PSYC elective	4	PSYC elective	4				
PSYC interdisciplinary cluster	4	PSYC interdisciplinary cluster	4				
EESC 2000	1						
<b>17</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**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	4
		ENGW 3315	4	Elective (or AP credit, etc.)	4		
		PSYC interdisciplinary cluster	4				
		Elective	4				
<b>0</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PSYC lab elective	4	Elective	4	Vacation	
		PSYC seminar elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

Total Hours: 130

### Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC area A elective	4	PSYC elective	4	Vacation	
ENGW 1111	4	PSYC elective	4	Elective	4		
Math requirement	4	Elective	4				
PSYC 1214 (or other PSYC elective)	4	Elective	4				
PSYC 1000	1						
	17		16		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Co-op		Co-op		Elective (or AP credit, etc.)	4
PSYC area B elective	4					Elective (or AP credit, etc.)	4
PSYC elective	4						
PSYC interdisciplinary cluster	4						
EESC 2000	1						
	17		0		0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC area A elective	4	Co-op		Co-op		Elective (or AP credit, etc.)	4
PSYC area B elective	4					Elective (or AP credit, etc.)	4
PSYC interdisciplinary cluster	4						
Elective	4						
	16		0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC lab	4	PSYC lab elective	4	Elective	4	Vacation	
ENGW 3315	4	PSYC seminar elective	4	Elective	4		
PSYC interdisciplinary cluster	4	Elective	4				
PSYC elective	4	Elective	4				
	16		16		8		0

Total Hours: 130

## American Sign Language and Psychology, BS

This combined major educates students in cognitive psychology, psycholinguistics, and the structures of human languages in general and American Sign Language (ASL) in particular. Students have an opportunity to simultaneously gain proficiency in speaking and interpreting ASL, giving them access to the culture of Deaf Americans; insights into various features of spoken language; and firsthand experience of the principles underlying the spatial organization of discourse required by signed languages. This knowledge and the psychology background from the major provide a foundation for more advanced studies of ASL and interpreting.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4

### Social and Cultural World

DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4

<b>Linguistics</b>		
LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Performance Interpreting</b>		
INTP 3500	The Interpreting Profession	2
<b>Interpreting</b>		
INTP 3510	Interpreting Inquiry Texts	4

## Psychology Requirements

Code	Title	Hours
<b>Psychology</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3466	Cognition	4

### Psychology Lab or Directed Study

Complete one of the following:			4
PSYC 4600	Laboratory in Research Design		
PSYC 4606	Laboratory in Biological Psychology		
PSYC 4610	Laboratory in Psycholinguistics		
PSYC 4612	Laboratory in Cognition		
PSYC 4614	Laboratory in Social Psychology		
PSYC 4616	Laboratory in Personality		
PSYC 4622	Laboratory in Sensation and Perception		
PSYC 4624	Laboratory in Affective Science		
PSYC 4626	Laboratory in Life-Span Emotional Development		
PSYC 4628	Laboratory in Developmental Psychology		
PSYC 4991	Directed Study Research		

### Personal/Social Bases of Behavior (Area A)

Complete two of the following:			8
PSYC 3400	Personality		
PSYC 3402	Social Psychology		
PSYC 3404	Developmental Psychology		
PSYC 3406	Abnormal Psychology		

### Biological/Cognitive Bases of Behavior (Area B)

Complete one of the following:			4
PSYC 3450	Learning and Motivation		
PSYC 3451	Learning Principles and Behavior Analysis		
PSYC 3452	Sensation and Perception		
PSYC 3458	Biological Psychology		

### Language/Cognition Elective

Complete one of the following:			4
PSYC 4520	Language and the Brain		
PSYC 4522	Psychology of Reading		
PSYC 4524	Cognitive Development		
PSYC 4658	Seminar in Psycholinguistics		
PSYC 4660	Seminar in Cognition		
PSYC 4674	Seminar in Cognitive Neuroscience		

## Integrative Requirements

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
PSYC 3464	Psychology of Language	4

## Combined-Major GPA Requirement

Minimum 2.750 GPA required in all 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	LING 1150	4				
PSYC 1101	4	MATH 1215	4				
ENGW 1111	4	Elective	4				
		16	16	0	0	0	0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
DEAF 2500	4	PSYC 2320	4				
PSYC 3464	4	PSYC 3466	4				
Elective	4	Elective	4				
		16	16	0	0	0	0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 3101	4	DEAF 2700	4	Vacation	0	Vacation	0
Psych Area A elective	4	Psych Area B elective	4				
ENGW 3315	4	Language/cognition elective	4				
INTP 3510	4	AMSL 3102	4				
		16	16	0	0	0	0

#### Year 4

Fall	Hours	Spring	Hours
INTP 4940	4	Psych lab elective	4
Elective	4	Psych Area A elective	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 128

## 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Business Requirements

Code	Title	Hours
<b>Required Courses</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
ENTR 2301	Innovation!	4
FINA 2201	Financial Management	4
INTB 1203	International Business and Global Social Responsibility	4
MISM 2301 or SCHM 2301	Management Information Systems Supply Chain and Operations Management	4
MKTG 2201	Introduction to Marketing	4
ORGB 3201	Organizational Behavior	4
STRT 4501	Strategy in Action	4

#### Supporting Courses for Business

ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	4
MATH 1231	Calculus for Business and Economics	4

### Business Concentration

Complete one of the following concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)

- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320 or MGSC 2301	Statistics in Psychological Research Business Statistics	4
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
PSYC 3400	Personality	4
PSYC 3404	Developmental Psychology	4
<b>Required Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	
<b>Required Lab</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	

### Psychology Electives

Complete two PSYC courses not used to fulfill the requirements above:	8
PSYC 1001 to PSYC 5999	



## Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
BUSN 1102	Personal Skill Development for Business	1
or PSYC 1000	Psychology at Northeastern	

### Co-op Preparation

Complete one of the following: 1		
BUSN 1103	Professional Development for Business Co-op	
or EESC 2000	Professional Development for Co-op	

## Integrative Course

Code	Title	Hours
ORGB 3201	Organizational Behavior	4

## Business GPA Requirement

A minimum 2.000 GPA in business courses is required.

## Psychology GPA Requirement

A minimum 2.000 GPA in psychology courses is required.

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Program Requirement

128 total semester hours required

## Computer Science and Cognitive Psychology, BS

The computer science and cognitive psychology combined major provides a foundation in general psychology, psychology of language, cognition, and statistics—all supplemented by an experimental laboratory course, seminar course, and psychology electives. Students who choose this program often have a general interest in human psychology or specific interests in artificial intelligence or human-computer interaction.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

### Computer Science Fundamental Courses

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

### Computer Science Required Courses

CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 4100	Artificial Intelligence (Integrative course)	4
CS 4500 or CS 4530	Software Development (Integrative course)	4
IS 4300	Human Computer Interaction (Integrative course)	4

### Presentation Requirement

THTR 1170	The Eloquent Presenter	1
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### Khoury Elective Courses

With adviser approval, a directed study, research, project study, or appropriate graduate-level course may also be taken as a computer science elective.

Complete twelve credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 12

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Psychology Courses

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4

### Advanced Psychology

PSYC 3452 or PSYC 3458	Sensation and Perception	4
	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	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	

### Psychology Electives

Note: Courses satisfying the categories above cannot be reused.

Complete two of the following: 8

PSYC 3402	Social Psychology
PSYC 3404	Developmental Psychology
PSYC 3450	Learning and Motivation
PSYC 3451	Learning Principles and Behavior Analysis
PSYC 3452	Sensation and Perception
PSYC 3458	Biological Psychology
PSYC 4512	Neuropsychology
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4622	Laboratory in Sensation and Perception
PSYC 4628	Laboratory in Developmental Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
With prior approval, directed study research and Honors Project courses can also be counted:	
PSYC 4970	Junior/Senior Honors Project 1
PSYC 4971	Junior/Senior Honors Project 2
PSYC 4991	Directed Study Research

ENGW 3302	Advanced Writing in the Technical Professions	4
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUPath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Understanding Societies and Institutions
- Analyzing and Using Data
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	PSYC 3466	4	Elective	4		
CS 2500 and CS 2501	5	MATH 1341	4				
PSYC 1101	4	Elective	4				
ENGW 1111	4						
		19	17		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Khoury elective	4	Elective	4	Co-op	
CS 3000	4	IS 4300	4	Elective	4		
Elective	4	PSYC elective	4				

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
A grade of C- or higher is required:		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Advanced Writing in the Disciplines</b>		

740 Computer Science and Cognitive Psychology, BS

PSYC 3464	4	PSYC 3452 or 3458	4			
		CS 1210	1			
	16		17		8	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4100	4	Elective	4	Co-op	
		PSYC lab elective	4	Elective	4		
		Khoury elective	4				
		Khoury elective	4				
		THTR 1170	1				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		CS 4500	4	Elective	4
		PSYC elective	4	ENGW 3302	4
		PSYC seminar	4		
		Computing and social issues	4		
	0		16		8

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 1800 and CS 1802	5	PSYC 3466	4				
CS 2500 and CS 2501	5	Elective	4				
PSYC 1101	4	Elective	4				
ENGW 1111	4						
	19		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	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				
		Khoury elective	4				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	IS 4300	4	Elective	4	Co-op	0
		ENGW 3302	4	Elective	4		
		PSYC elective	4				

		Khoury elective	4			
		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
		Khoury elective	4	Elective	4		
		PSYC lab elective	4				
		PSYC elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	CS 4500	4
		PSYC seminar	4
		Computing and social issues	4
		Elective	4
	0		16

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation	0	Vacation	0
CS 2500 and CS 2501	5	PSYC 3466	4				
PSYC 1101	4	Elective	4				
ENGW 1111	4	Elective	4				
CS 1200	1						
	19		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	Co-op	0	Co-op	0	Vacation	0
MATH 1341	4						
PSYC 2320	4						
Elective	4						
CS 1210	1						
	17		0		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3464	4	Co-op	0	Co-op	0	Elective	4
CS 3000	4					Elective	4
PSYC 3452	4						
THTR 1170	1						
Khoury elective	4						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
IS 4300	4	Co-op	0	Co-op	0	Elective	4
ENGW 3302	4					Elective	4
PSYC elective	4						
Khoury elective	4						
	16		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
CS 4100	4	CS 4500	4
Khoury elective	4	PSYC seminar	4
PSYC lab elective	4	Computing and social issues	4
PSYC elective	4	Elective	4
	16		16

Total Hours: 134

## Criminal Justice and Psychology, BS

This combined major educates students in criminal justice and psychology and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including the biological and psychosocial bases of behavior, learning, personality, and cognition. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the relationships between the fields, as they relate to understanding and addressing criminal behavior.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Criminal Justice Requirements

Code	Title	Hours
<b>Criminal Justice Core Requirements</b>		
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:			4
CRIM 3010	Criminal Violence		
CRIM 3030	Global Criminology		
CRIM 3050	Organized Crime		
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		

#### Computer Science

CS 1100	Computer Science and Its Applications	4
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#### Mathematics

Complete one of the following:			4
MATH 1215	Mathematical Thinking		
MATH 1231	Calculus for Business and Economics		
MATH 1241	Calculus 1		

#### Electives

Complete two courses in the following range:			8
CRIM 4000 to CRIM 5999			

### Psychology Requirements

Code	Title	Hours	
<b>Introductory Course</b>			
PSYC 1101	Foundations of Psychology	4	
<b>Statistics</b>			
PSYC 2320	Statistics in Psychological Research	4	
<b>Personality/Social Bases of Behavior</b>			
Complete two of the following:			8
PSYC 3400	Personality		
PSYC 3402	Social Psychology		
PSYC 3404	Developmental Psychology		
PSYC 3406	Abnormal Psychology		
<b>Biological/Cognitive Bases of Behavior</b>			
Complete two of the following:			8
PSYC 3450	Learning and Motivation		
or PSYC 3451	Learning Principles and Behavior Analysis		
PSYC 3452	Sensation and Perception		
PSYC 3458	Biological Psychology		

PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Research Experience</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

<b>Electives</b>		
Complete two PSYC courses.		8

### Integrative Requirement

Code	Title	Hours
CRIM 3040	Psychology of Crime	4

### Criminal Justice and Psychology Combined-Major Credit Requirement

Complete 84 semester hours in the major.

### Program Requirement

128 total semester hours required

## Data Science and Psychology, BS

The psychology and data science combined major offers an integrative curriculum in the study of mind, brain, and behavior and in the collection, manipulation, storage, retrieval, and computational analysis of data in its various forms, including numeric, textual, image, and video data from small to large volumes. The study of psychology draws upon empirical research with both humans and animals to investigate and seek explanations for the behavior and mental life of individuals and develop assessment tools and treatment options for addressing clinical problems. In this program, students have an opportunity to augment such knowledge with skills in big data analysis, data science, and data analytics.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Data Science Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
or PSYC 1000	Psychology at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
or EESC 2000	Professional Development for Co-op	
<b>Computer Science Foundations</b>		
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	
<b>Computer Science Required Courses</b>		
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
<b>Data Science Foundations</b>		
DS 3000	Foundations of Data Science	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning and Data Mining 1	4
DS 4900	Data Science Senior Project	4
<b>Supporting Course for Data Science</b>		
THTR 1170	The Eloquent Presenter	1

### Khoury Elective

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete four credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	4
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Computer Science Writing Requirements

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Psychology Requirements

Code	Title	Hours
<b>Foundations of Psychology</b>		
PSYC 1101	Foundations of Psychology	4
<b>Statistics in Psychological Research</b>		
PSYC 2320	Statistics in Psychological Research	4
<b>Mathematics Foundations</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
<b>Personality/Social Basis of Behavior</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Cognitive/Biological Basis of Behavior</b>		
Complete two of the following:		8
PSYC 3450	Learning and Motivation	
or PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Laboratory</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	

PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

### Psychology Electives

Complete two of the following:	8
PSYC 2370 to PSYC 5999	

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	
IS 4300	Human Computer Interaction	

### Required General Electives

Code	Title	Hours
Complete 28 credits of general electives.		28

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Psychology GPA Requirement

Minimum 2.000 GPA required in all PSYC courses

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns: Five Years, Three Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	PSYC 2320	4				
CS 2500 and CS 2501	5	Personality/ social basis of behavior 1	4				
PSYC 1101	4	General elective	4				
ENGW 1111	4						
		19			17	0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	DS 3000	4	Vacation		Co-op	
MATH 1341	4	CS 1210	1				



Cognitive/ biological basis of behavior 1	4	Cognitive/ biological basis of behavior 2	4			
General elective	4	Personality/ social basis of behavior 2	4			
		General elective	4			
	16		17		0	0
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		DS 4200	4	General elective	4	Co-op
		CS 3200	4	PSYC elective	4	
		PSYC laboratory	4			
		THTR 1170	1			
		General elective	4			
	0		17		8	0
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		DS 4300	4	ENGW 3302	4	Co-op
		DS 4400	4	PSYC elective	4	
		General elective	4			
		PSYC seminar	4			
	0		16		8	0
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op		DS 4900	4			
		Integrative requirement	4			
		Khoury Elective	4			
		General elective	4			
	0		16			

Total Hours: 134

## Four Years, Two Co-ops

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	General elective
CS 1800 and CS 1802	5	PSYC 2320	4	General elective	4	General elective
CS 2500 and CS 2501	5	Personality/ social basis of behavior 1	4			
PSYC 1101	4	General elective	4			

ENGW 1111	4					
	19		17		8	8
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 3200	4	CS 1210	1	PSYC elective	4	Co-op
DS 3000	4	DS 4200	4	General elective	4	
Cognitive/ biological basis of behavior 1	4	Personality/ social basis of behavior 2	4			
MATH 1341	4	Cognitive/ biological basis of behavior 2	4			
		General elective	4			
	16		17		8	0
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		DS 4300	4	PSYC elective	4	Co-op
		DS 4400	4	ENGW 3302	4	
		PSYC laboratory	4			
		THTR 1170	1			
		General elective	4			
	0		17		8	0
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op		DS 4900	4			
		Khoury elective	4			
		PSYC seminar	4			
		Integrative requirement	4			
	0		16			

Total Hours: 134

## Economics and Psychology, BS

This combined major educates students in economics and psychology and the interface between the two disciplines. Economics courses provide a foundation in macroeconomics, microeconomics, and applied econometrics. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, decision making, learning, and motivation. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining the complexity of human behavior in an economic context.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Economics Requirements

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
ECON 4692	Senior Economics Seminar	4
<b>Economics Electives</b>		
Complete four ECON courses from the following ranges with no more than two at the ECON 1200–ECON 1999 range. The course used to satisfy the integrative course requirement may not be used as an economics elective:		16
ECON 1200–ECON 1999		
ECON 3000–ECON 4689		
ECON 4900–ECON 4999		
ECON 5200–ECON 5999		

## Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3402	Social Psychology	4
PSYC 3450	Learning and Motivation	4
PSYC 3466	Cognition	4
<b>Required Lab</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	

## Required Seminar

Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

## Psychology Electives

Complete three PSYC courses not used to fulfill requirements above. 12

## Other Requirements Outside Major

Code	Title	Hours
PSYC 1000	Psychology at Northeastern	1
or ECON 1000	Economics at Northeastern	
EESC 2000	Professional Development for Co-op	1
or EESH 2000	Professional Development for Co-op	
ENGW 1111	First-Year Writing	4
MATH 1231	Calculus for Business and Economics	4
or MATH 1341	Calculus 1 for Science and Engineering	
CS 1100	Computer Science and Its Applications	4
COOP 3945	Co-op Work Experience	0

## Integrative Course

Code	Title	Hours
ECON 4681	Information Economics and Game Theory	4
or ECON 3416	Behavioral Economics	

## NUPath Not Fulfilled by Major

Code	Title	Hours
NUPath EI	Expression and Innovation	4
NUPath IC	Interpreting Culture	4
NUPath DD	Difference and Diversity	4
NUPath ER	Ethical Reasoning	4
NUPath WD	Advanced Writing in the Discipline	4

## Open Electives

Complete three open electives. 12

## Combined Major Credit/ GPA Requirement

Complete 84 semester hours in the major.

Grades in the following required courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4

ECON 2560	Applied Econometrics	4
PSYC 2320	Statistics in Psychological Research	4

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC 2320	4	ECON elective	4	Open elective	4
MATH 1213 or 1341	4	ECON 1116	4	PSYC elective	4	ECON elective	4
ENGW 1111	4	CS 1100	4				
ECON 1115	4	PSYC elective	4				
ECON 1000 or PSYC 1000	1						
	17		16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3402	4	PSYC 3466	4	NUpath DD	4	Co-op	
ECON 2315	4	ECON 2316	4	PSYC elective	4		
ECON elective	4	NUpath IC	4				
NUpath EI	4	Open elective	4				
		EESC 2000 or EESH 2000	1				
	16		17		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PSYC 3450	4	ECON 4692	4	Co-op	
		ECON 2560	4	PSYC lab	4		
		ECON elective	4				
		NUpath ER	4				
	0		16		8		0

#### Year 4

Fall	Hours	Spring	Hours
Co-op		ECON 4681 or 3416	4
		PSYC seminar	4
		NUpath WD	4
		Open elective	4
	0		16

Total Hours: 130

## Health Science and Psychology, BS

The combined Bachelor of Science degree program in health science and psychology is designed to provide an interdisciplinary approach to public health and psychology. Through interdisciplinary explorations, students have the opportunity to develop knowledge in health promotion and illness prevention by way of understanding people's behaviors, perceptions, and emotions within the contexts of relationships and culture. This highly flexible curriculum is enhanced by experiential learning opportunities and prepares students to practice in interdisciplinary settings and be successful in sustaining and promoting health across populations.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4540	Health Education and Program Planning	4

## Supporting Courses for Health Science

BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3458	Biological Psychology	4

**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 3452 Sensation and Perception	
PSYC 3464 Psychology of Language	
PSYC 3466 Cognition	

**Psychology Electives**

Complete 12 semester hours from the following subject area:	12
PSYC	

**Psychology Lab**

Complete one of the following:	4
PSYC 4600 Laboratory in Research Design	
PSYC 4606 Laboratory in Biological Psychology	
PSYC 4610 Laboratory in Psycholinguistics	
PSYC 4612 Laboratory in Cognition	
PSYC 4614 Laboratory in Social Psychology	
PSYC 4616 Laboratory in Personality	
PSYC 4622 Laboratory in Sensation and Perception	
PSYC 4624 Laboratory in Affective Science	
PSYC 4626 Laboratory in Life-Span Emotional Development	
PSYC 4628 Laboratory in Developmental Psychology	

**Psychology Seminar**

Complete one of the following:	4
PSYC 4654 Seminar in Behavioral Modification	
PSYC 4656 Seminar in Biological Psychology	
PSYC 4658 Seminar in Psycholinguistics	
PSYC 4660 Seminar in Cognition	
PSYC 4662 Seminar in Personality	
PSYC 4664 Seminar in Social Psychology	
PSYC 4666 Seminar in Clinical Psychology	
PSYC 4668 Seminar in Sensation and Perception	
PSYC 4674 Seminar in Cognitive Neuroscience	
PSYC 4676 Seminar in Developmental Psychology	
PSYC 4678 Seminar in Social and Affective Neuroscience	

**Supporting Courses**

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
HSCI 1000	College: An Introduction	
PSYC 1000	Psychology at Northeastern	
<b>First-Year Writing</b>		
ENGW 1111	First-Year Writing	4
<b>Co-op Preparation</b>		
Complete one of the following:		1

HSCI 2000	Professional Development for Bouvé Co-op	
EESC 2000	Professional Development for Co-op	

**Math**

MATH 1241	Calculus 1	4
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**Advanced Writing in the Discipline**

ENGW 3306	Advanced Writing in the Health Professions	4
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**Ethical Reasoning**

PHIL 1165	Moral and Social Problems in Healthcare	4
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**Open Electives**

Complete 28 semester hours of general electives.	28
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**Integrative Requirement**

Code	Title	Hours
PSYC 3510	Brain, Behavior, and Immunity	4
or PSYC 4514	Clinical Neuroscience	
or CAEP 2012	Health Psychology: An Introduction to Concepts, Theories, and Research	

**Health Sciences Major Requirement**

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

**Psychology GPA Requirement**

A grade of C or higher is required for all PSYC courses.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Four Years, One Co-op Plan**

**Year 1**

Fall	Hours	Spring	Hours
HSCI 1000 or PSYC 1000	1	BIOL 1113	4
PHTH 1260 or 1261	4	BIOL 1114	1
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
BIOL 1112	1	ENGW 1111	4
MATH 1241	4	Elective	4
PSYC 1101	4		
	18		18

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours
PSYC 2320	4	Public health core	4	Psychology elective	4
Area A course	4	Public health core	4	Area B course	4
Public health core	4	Area A course	4		

PSYC 3458	4 Psychology elective	4				
	16	16	8			

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESC 2000	1	Co-op		Co-op		ENGW 3306	4
Psychology lab	4					PHTH 4540	4
PHIL 1165	4						
Open electives	8						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	Psychology seminar	4
Psychology elective	4	PSYC 3510, 4514, or CAEP 2012	4
Open electives	8	Open electives	8
	16		16

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Bouvé)****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1000 or HSCI 1000	1	PSYC Area A selective	4	PSYC Area B selective	4	Open electives	8
PHTH 1260 or 1261	4	BIOL 1113	4	public health core	4		
BIOL 1111	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
BIOL 1112	1	BIOL 1114	1				
MATH 1241	4	ENGW 1111	4				
PSYC 1101	4						
	18		18		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Co-op		Co-op		PHIL 1165	4
Public health core	4					ENGW 3306	4
PSYC 3458	4						
Public health core	4						
HSCI 2000 or EESC 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Public health core	4	Co-op		Co-op		Open electives	8

PSYC Area A selective	4					
PSYC elective	4					
Open elective	4					
	16		0		0	8

**Year 4**

Fall	Hours	Spring	Hours
Public health core	4	PSYC 3510, 4514, or CAEP 2012	4
PSYC lab	4	Psychology seminar	4
PSYCH elective	4	PSYC elective	4
Open elective	4	Open Elective	4
	16		16

Total Hours: 133

**Four Years, Two Co-ops Plan (College: Science)****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1000 or HSCI 1000	1	PSYC Area A selective	4	PSYC Area B selective	4	Open electives	8
PHTH 1260 or 1261	4	BIOL 1113	4	public health core	4		
BIOL 1111	4	BIOL 1114	1				
BIOL 1112	1	ENGW 1111	4				
MATH 1241	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5				
PSYC 1101	4						
	18		18		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 2320	4	Public health core	4	PSYC elective	4	Co-op	
Public health core	4	Public health core	4	Open elective	4		
PSYC 3458	4	PSYC Area A selective	4				
PHIL 1165	4	PSYC elective	4				
		EESC 2000 or HSCI 2000	1				
	16		17		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Public health core	4	Open electives	8	Co-op	
		PSYC lab	4				
		ENGW 3306	4				

PSYC 3510, 4514, or CAEP 2012	4			
	0	16	8	0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		Psychology seminar	4
		PSYC elective	4
		Open electives	8
	0	16	

Total Hours: 133

## Linguistics and Psychology, BS

This combined major is designed to educate students in psychology, linguistics, and the interface between the two disciplines, which are core areas within the field of cognitive science. Students study the formal structures of human language; sociocultural aspects of language use; and the cognitive aspects of language representations, language acquisition, and language processing. Students receive interdisciplinary training in the methods of experimental psychology, psycholinguistics, and linguistic analysis.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete three of the following (not counted elsewhere):		12
DEAF 2700	ASL Linguistics	

LING 3420	Phonetics
LING 3422	Phonology
LING 3424	Morphology
LING 3434	Bilingualism
LING 3442	Sociolinguistics
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics
LING 3460	Historical Linguistics
LING 4654	Seminar in Linguistics
LING 4891	Research Seminar in Linguistics
or LING 4970	Junior/Senior Honors Project 1
or LING 4971	Junior/Senior Honors Project 2
or LING 4991	Directed Study Research
LING 4993	Independent Study
PHIL 1115	Introduction to Logic

### Psychology Requirements

Code	Title	Hours
<b>Introductory and Intermediate Psychology</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<b>Advanced Psychology</b>		
PSYC 3402	Social Psychology	4
PSYC 3466	Cognition	4
<b>Psychology Lab</b>		
Complete one of the laboratory courses or, with prior approval, a directed study or honors project on a topic related to psycholinguistics or cognition:		4
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4970	Junior/Senior Honors Project 1	
PSYC 4971	Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	
<b>Psychology Seminar</b>		
Complete one of the following:		4
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4674	Seminar in Cognitive Neuroscience	
<b>Psychology Electives</b>		
A directed study on a topic related to psycholinguistics or cognition may be taken with prior approval.		
Complete two of the following (not counted elsewhere):		8
PSYC 3404	Developmental Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 4520	Language and the Brain	
PSYC 4522	Psychology of Reading	
PSYC 4524	Cognitive Development	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	



PSYC 4628	Laboratory in Developmental Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4991	Directed Study Research

### Integrative Requirements

Code	Title	Hours
PSYC 3464	Psychology of Language	4

#### Experiential Learning

Complete one of the following options. Courses used to satisfy this requirement will also typically simultaneously satisfy a requirement above. 0-8

Study Abroad (not a Dialogue) International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	
PSYC 4970 and PSYC 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
PSYC 4991	Directed Study Research	

### Supporting Courses

Code	Title	Hours
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#### Language Requirement

Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required. 8

#### Mathematics Requirement

Complete one of the following: 4

CS 1800	Discrete Structures	
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
MATH 1242	Calculus 2	
MATH 1251	Calculus and Differential Equations for Biology 1	
MATH 1252	Calculus and Differential Equations for Biology 2	
MATH 1340	Intensive Calculus for Engineers	
MATH 1341	Calculus 1 for Science and Engineering	
MATH 1342	Calculus 2 for Science and Engineering	

### Linguistics and Psychology Combined Major Credit Requirement

Complete 72 semester hours in the major (excluding supporting courses).

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation	0	Vacation	0
PSYC 1101	4	PSYC 3464	4				
ENGW 1111	4	Foreign language course	4				
Math requirement	4	NUpath or elective	4				
		16		16		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	Linguistics structure course	4	Vacation	0	Co-op	0
PSYC 2320	4	Linguistics elective	4				
PSYC 3466	4	PSYC 3402	4				
Foreign language course	4	Psychology elective	4				
		EESC 2000		1			
		16		17		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistics structure course	4	NUpath or elective	4	Co-op	0
		Linguistics or psychology elective		4		4	
		Psychology laboratory		4			
		ENGW 3315		4			
		0		16		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistics structure course	4	NUpath or elective	4	Co-op	0
		Linguistics elective		4		4	
		Linguistics or psychology elective		4			
		Psychology seminar		4			
		0		16		8	
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	NUpath or elective	4				
		Elective		4			

**Mathematics and Psychology, BS**

In the mathematics and psychology combined-major BS program, psychology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare the student toward developing psychological models using mathematics.

**Program Requirements**

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 3001 to MATH 5999		

**Psychology Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
<b>Area A (Personality/Social Basis of Behavior)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Area B (Biological/Cognitive Basis of Behavior)</b>		
Complete two of the following:		8
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
<b>Psychology Laboratory</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	

Elective	4
Elective	4
0	16

Total Hours: 129

**Sample Four Years, No Co-op**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation	0	Vacation	0
PSYC 1101	4	PSYC 3464	4				
ENGW 1111	4	Foreign language course	4				
Math requirement	4	NUpath or elective	4				
	16		16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3412	4	Linguistics structure course	4	Vacation	0	Vacation	0
PSYC 2320	4	Linguistics elective	4				
PSYC 3466	4	PSYC 3402	4				
Foreign language course	4	Psychology elective	4				
	16		16		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Linguistics structure course	4	Linguistics structure course	4	Vacation		Vacation	
Linguistics elective	4	Linguistics or psychology elective	4				
Psychology lab	4	NUpath or elective	4				
ENGW 3315	4	Elective	4				
	16		16		0		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Linguistics or psychology elective	4	NUpath or elective	4				
Psychology seminar	4	Elective	4				
NUpath or elective	4	Elective	4				
Elective	4	Elective	4				
	16		16				

Total Hours: 128

PSYC 4626	Laboratory in Life-Span Emotional Development
PSYC 4628	Laboratory in Developmental Psychology

**Psychology Capstone Requirement**

Complete one of the following: 4

PSYC 4654	Seminar in Behavioral Modification
PSYC 4656	Seminar in Biological Psychology
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4662	Seminar in Personality
PSYC 4664	Seminar in Social Psychology
PSYC 4666	Seminar in Clinical Psychology
PSYC 4668	Seminar in Sensation and Perception
PSYC 4674	Seminar in Cognitive Neuroscience
PSYC 4676	Seminar in Developmental Psychology
PSYC 4678	Seminar in Social and Affective Neuroscience

**Psychology Elective**

Any PSYC course in the 3000 range and up 4

**Integrative Requirement**

Code	Title	Hours
PSYC 4540	Quantitative Topics in Psychology and Behavioral Neuroscience	4

**Mathematics and Psychology Combined-Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1365	4	MATH 1341	4	Vacation		Vacation	
PSYC 1101	4	PSYC Area A	4				
NUpath EI	4	Open elective	4				
ENGW 1111	4	NUpath IC	4				
MATH 1000 or PSYC 1000	1						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1342	4	MATH 2321	4	Vacation		Co-op	
PSYC 2320	4	PSYC Area A	4				
PSYC Area B	4	Open elective	4				
NUpath DD	4	MATH elective	4				
		EESC 2000	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		MATH 2331	4	MATH 2341	4	Co-op	
		PSYC Area B	4	Adv writing	4		
		PSYC elective	4				
		Open elective	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PSYC lab	4	Open elective	4	Co-op	
		MATH 3081	4	Open elective	4		
		PSYC 4540	4				
		NUpath ER	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		PSYC seminar	4
		MATH elective	4
		Open elective	4
		Open elective	4
	0		16

Total Hours: 130

**Psychology and Music, BS**

This combined major educates students in psychology and music and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, psycholinguistics, perception, and the biological basis of behavior. Music courses provide a foundation in music theory; creative music in context; contemporary/ethnomusicology; music perception and cognition; and the psychoacoustics of music. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining human behavior in the domain of music.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Psychology Requirements

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3452	Sensation and Perception	4
PSYC 3458	Biological Psychology	4
PSYC 3464	Psychology of Language	4
PSYC 3466	Cognition	4

#### Required Lab

Complete one of the following		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	

#### Required Seminar

Complete one of the following		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

#### Psychology Electives

Complete two PSYC courses not used to fulfill requirements above	8
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### Music Theory Requirements

Code	Title	Hours
<b>Required Courses</b>		
MUSC 1201	Music Theory 1	4
MUSC 1202	Music Theory 2	4

### Music in Context

Code	Title	Hours
MUSC 1001	Music in Everyday Life	4

#### Creative Category

Complete one of the following 4-semester-hour courses or choose four 1-semester hour ensembles and/or lessons from the list 4

MUSC 2150	Making a Musical: Analysis, Craft, and Creation
MUSC 2208	Jazz Improvisation
MUSC 2209	Conducting
MUSC 2210	Introduction to Songwriting
MUST 1220	Introduction to Music Technology
MUST 1301	Introduction to Composition
MUST 2320	Sound Design
<i>Ensembles and Lessons</i>	
MUSC 1901	Music Lessons 1
MUSC 1902	Music Lessons 2
MUSC 1904	Chorus
MUSC 1905	Concert Band
MUSC 1906	Orchestra
MUSC 1907	Wind Ensemble
MUSC 1911	Jazz Ensemble
MUSC 1912	Rock Ensemble
MUSC 1913	Blues/Rock Ensemble
MUSC 1914	Create Your Own Music
MUSC 1915	Chamber Ensemble
MUSC 1916	Contemporary Music Ensemble
MUSC 1917	Jazz Choir and Combo
MUSC 1918	World Music Ensemble
MUSC 1919	Fusion Ensemble
MUSC 1920	Pep Band

#### Contemporary or Ethnomusicology Category

Complete one of the following		4
MUSC 2101	Black Popular Music	
MUSC 2130	Music of Asia	
MUSC 2150	Making a Musical: Analysis, Craft, and Creation	
MUSC 2310	Popular Music Since 1945	
MUSC 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 3560	Topics in Music since 1900	
MUSI 3351	Music and Social Justice	
MUSI 3401	Hip Hop in the Music Industry	
MUSI 5900	Ethnography in Creative Industries	

*Note MUSC 2150 can be used to meet either the Creative or the Ethnomusicology/Contemporary requirement, but not both*

### Music Requirements

Code	Title	Hours
MUSC 2350	Acoustics and Psychoacoustics of Music	4
or INAM 3200	Creative Cognition	
MUSC 3300	Music Perception and Cognition	4

**Capstone**

MUSC 4510	Music and the Brain Research	4
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**Music Electives**

Code	Title	Hours
Complete two courses from MUSC, MUSI, or MUST not used to fulfill the requirements above		
		8

**Other Requirements Outside Major**

Code	Title	Hours
PSYC 1000 or MUSC 1000	Psychology at Northeastern Music at Northeastern	1
EESC 2000 or EEAM 2000	Professional Development for Co-op Professional Development for Co-op	1
COOP 3945 or EEAM 2945	Co-op Work Experience College of Arts, Media and Design Co-op Experience	0
ENGW 1111	First-Year Writing	4
Complete one of the following		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1241	Calculus 1	

**Bridge/Integrative Courses**

Code	Title	Hours
Note: MUSC 3300 is already required above.		
MUSC 3300	Music Perception and Cognition	

**NUpath not fulfilled by major**

Code	Title	Hours
NUpath DD (Some Music-in-Context courses satisfy DD.)		4
NUpath ER (Some Music-in-Context courses satisfy ER.)		4
NUpath WD		4

**Open Electives**

Code	Title	Hours
Complete seven open electives		28

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC 2320	4	PSYC 3466	4	Open Elective	4
MUSC 1001	4	MUSC 1201	4	Music Elective	4	Open Elective	4
ENGW 1111	4	MATH 1213	4				
NUpath DD	4	NUpath ER	4				
MUSC 1000 or PSYC 1000	1						
		17			16		
						8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3458	4	PSYC 3464	4	Open Elective	4	CO-OP	0

MUSC 1202	4	MUSC 2350 or INAM 3200	4	PSYC Elective	4		
Open Elective	4	Contemporary/ Ethno Course	4				
MUSC 3300	4	Open Elective	4				
		EESC 2000 or EEAM 2000	1				
		16			17		
						8	
						0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CO-OP	0	PSYC 3452	4	PSYC Lab	4	CO-OP	0
		Creative MUSC Course	4	PSYC Elective	4		
		MUSC 4510	4				
		Open Elective	4				
		0			16		
						8	
						0	

Year 4					
Fall	Hours	Spring	Hours		
CO-OP	0	PSYC Seminar	4		
		Music Elective	4		
		WD	4		
		Open Elective	4		
		0			16

Total Hours: 130

**Psychology, Minor**

The Department of Psychology offers a minor in psychology, which involves taking five psychology courses, some required and some elective, that focus on the multidisciplinary study of mind, brain, and behavior. The minor accommodates students with a broad range of interests in basic and applied psychology. Students can elect to take fundamental and advanced courses spanning biological psychology, cognition, social psychology, personality psychology, sensation and perception, clinical psychology, applied psychology, learning and motivation, developmental psychology, or other subfields of psychology to craft a minor that reflects their interests within this wide-ranging field.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* A maximum of two courses (or 8 semester hours) of transfer credit may count toward the minor. This minor is not available to students majoring in behavioral neuroscience or in any combined major that involves psychology. Courses taken pass/fail and receiving an S grade may not be used toward the minor.

Code	Title	Hours
<b>Required Course</b>		
PSYC 1101	Foundations of Psychology	4
<b>Personal/Social Bases of Behavior (Area A)</b>		
Transfer courses are not permitted to fulfill the Area A requirement.		
Complete one of the following:		4
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Transfer courses are not permitted to fulfill the Area B requirement.		
Complete one of the following:		4
PSYC 3450	Learning and Motivation	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	

## Elective Courses

Code	Title	Hours
Complete two PSYC courses.		8

## GPA Requirement

2.000 GPA required in the minor

## Interdisciplinary

## Programs

### Minors

- Environmental Chemistry (p. 458)
- Scientific Commercialization (p. 755)

## Environmental Chemistry, Minor

The minor in environmental chemistry offers an opportunity for students of any background interested in environmental sciences to better understand the chemistry of the environment. Students completing the minor in environmental chemistry have an opportunity to learn about the chemical processes of natural systems and environmental pollutants, while earning a credential that highlights their interest and expertise. This can be a useful course of study whether their primary degree and career will be in one of the traditional chemical, environmental, or engineering programs, or another allied field. No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* No more than two courses (totaling 8 SH to 10 SH) may double count with any major degree requirements.

## Required Courses

Code	Title	Hours
<b>Environmental Chemistry Core</b>		
Complete one of the following:		4
CIVE 2335	Environmental Engineering Chemistry	
ENVR 3410	Environmental Geochemistry	
<b>Chemistry Core</b>		
Complete one of the following:		5
CHEM 2321 and CHEM 2322	Analytical Chemistry and Lab for CHEM 2321	
CHEM 2331 and CHEM 2322	Bioanalytical Chemistry and Lab for CHEM 2321	
<b>Research Experience</b>		
Complete one of the following:		4
CHEM 4750	Senior Research	
CHEM 4901	Undergraduate Research	
CHEM 4992	Directed Study	
CIVE 4991	Research	
CIVE 4992	Directed Study	
ENVR 4900	Earth and Environmental Science Capstone	
or ENVR 4997	Senior Thesis	
ENVR 4992	Directed Study	

## Electives

Code	Title	Hours
Complete two of the following:		8-9
CIVE 2335	Environmental Engineering Chemistry (If not used to satisfy Environmental Chemistry Core)	
CIVE 3435	Environmental Pollution Fate and Transport	
CIVE 5300 and CIVE 5301	Environmental Sampling and Analysis and Lab for CIVE 5300	
ENVR 3125	Global Oceanic Change	
ENVR 3410	Environmental Geochemistry (If not used to satisfy Environmental Chemistry Core)	
ENVR 4500 and ENVR 4501	Applied Hydrogeology and Lab for ENVR 4500	
ENVR 4504	Environmental Pollution	
ENVR 4505	Wetlands	
ENVR 5190	Soil Science	

## GPA Requirement

Minimum 2.000 GPA required in all major courses

## Credit Requirement

Minimum of 21 hours required

## Scientific Commercialization, Minor

Science innovation—the creation of new scientific knowledge—and entrepreneurship—the translation and commercialization of such ideas into real-world solutions—each require distinctly different skills that are developed through years of experience. Though these undertakings are intimately linked, they are rarely taught together in an integrated



academic setting. The minor in science commercialization brings these two sides together and is designed for students who are interested in ventures in science-related areas (the energy sector, biotech and pharmaceuticals, advanced materials, etc.).

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. DMSB students can double-count only one course toward both this minor and their concentration.

### Required Courses

Code	Title	Hours
ENTR 2301	Innovation!	4
INSC 3000	Science Behind Innovation and Entrepreneurship	4
INSC 4000	Bridging Scientific Discovery and Innovation	4

### Electives

Code	Title	Hours
Complete two courses from the following:		8
ENTR 4505	Entrepreneurial Growth Strategy for Technology Ventures	
FINA 4610	Entrepreneurial Finance, Innovation Valuation, and Private Equity	
INSC 5000	Translating Scientific Discoveries: From Lab to Fab and Beyond	

### GPA Requirement

Minimum 2.000 GPA required in all major courses

### Credit Requirement

20 hours required

## Accelerated Bachelor/Graduate Degree Programs

The College of Science offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

## College of Social Sciences and Humanities

Website (<http://www.northeastern.edu/cssh/>)

**Uta Poiger, PhD**, Dean

**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

**Thomas Vicino, PhD**, Associate Dean, Graduate Studies

**Alisa Lincoln, PhD**, Associate Dean, Research

**Mary C. Mello, MA**, Assistant Dean, Undergraduate Academic Affairs

*Dean's Office*

420 Renaissance Park

617.373.5173

617.373.2942 (fax)

*Office of Student Academic Affairs*

180 Renaissance Park

617.373.3980

617.373.7281 (fax)

[csshadvising@northeastern.edu](mailto: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 advisers, college advisers, 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 advisers located in the Office of Student Academic Affairs in 180 Renaissance Park and faculty advisers located in the college's departments and program offices. Detailed advising information is available on the college website (<https://www.northeastern.edu/cssh/undergraduate/academic-advising/>). Pre-Law advising (<https://careers.northeastern.edu/article/pre-law/>) and premedical/pre dental advising (<http://www.northeastern.edu/prehealth/>) are also available.

## Academic Progression Standards

The College of Social Sciences and Humanities adheres to the university-wide academic progression standards 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 adviser 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 adviser in their major or program. This should be completed in the junior year to ensure ample time to complete any outstanding requirements.

## College Requirements

All students in the College of Social Sciences and Humanities must successfully complete their major, college, and university requirements for their specific degree.

### EXPERIENTIAL LIBERAL ARTS REQUIREMENT

The Experiential Liberal Arts course designation is part of a CSSH framework that emphasizes integration of experiential learning along with diversity and inclusion at key points in the curriculum. Students will ordinarily fulfill this requirement through any CSSH course on a Dialogue of Civilizations, participation in the Data, Ethics, and Culture spring semester in London, any CSSH service-learning course, or an ELA-designated course as listed here:

Code	Title	Hours
ANTH 3410	Ethnographic Field Experience	4
INTP 4995	Interpreting Practicum	4
CRIM 3200	Youth Crime and Justice	4
CRIM 4120	Courts and Sentencing	4
ECON 2350	Statistics	4
ENGL 2690	Boston in Literature	4
ENGL 2740	Writing and Community Engagement	4
ENGL 3340	Technologies of Text	4
ENGL 3375	Writing Boston	4
ENGL 3381	The Practice and Theory of Teaching Writing	4
ENGL 3382	Publishing in the 21st Century	4
ENGL 4400	Opening the Archive	4
HIST 1120	Public History, Public Memory	4
HIST 2000	Native American Resistance: Past and Present	4
HUSV 1101	Social Change and Human Services	4
HUSV 3520	Child Intervention and Treatment	4
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	4
POLS 2357	Growth and Decline of Cities and Suburbs	4
SOCL 2323	Ethnographic Methods	4
SOCL 3485	Environment, Technology, and Society	4
SPNS 3501	Advanced Spanish Conversation: Global Communication	4

Additional options for completing the ELA requirement will become available as they are approved. For the most up-to-date list of courses for

the ELA requirement and ELA options for your major, please consult your academic adviser and your degree audit.

## Interdisciplinary

### Interdisciplinary Major

- Politics, Philosophy, and Economics, BS (p. 757)

### Interdisciplinary Minors

- Computational Social Science, Minor (p. 760)
- Digital Methods in the Humanities, Minor (p. 761)
- Health, Humanities, and Society, Minor (p. 502)
- Food Systems Sustainability, Health, and Equity, Minor (p. 762)
- Latino/a, Latin American, and Caribbean Studies, Minor (p. 763)
- Law and Public Policy, Minor (p. 763)
- Urban Studies, Minor (p. 765)
- Women's, Gender, and Sexuality Studies, Minor (p. 765)

## Politics, Philosophy, and Economics, BS

Website (<https://www.northeastern.edu/cssh/ppe/>)

371 Holmes Hall  
617.373.3636  
617.373.4359 (fax)

The PPE major at Northeastern University brings together three of the most important approaches to understanding the world around us: political science, philosophy, and economics. The PPE major is an interdisciplinary degree that not only provides students with the analytic tools from three different disciplines but also teaches students to make connections across disciplines and to keep multiple perspectives in mind when analyzing complex social phenomena. This interdisciplinary perspective and set of skills are indispensable in our increasingly interconnected world and are essential in addressing the kinds of complex global problems future leaders will need to tackle.

There are a number of varieties of the PPE major that students may choose from in accordance with their own backgrounds and interests. These include:

- environment and energy policy
- international political economy
- law and justice
- logic and game theory
- political philosophy
- public and economic policy

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Politics, Philosophy, and Economics Major Requirements

Code	Title	Hours
<b>Foundation Course</b>		
PHIL 1160	Introduction to Economic Justice	4
<b>Core Courses</b>		
<i>Philosophy</i>		
PHIL 2303	Social and Political Philosophy	4
PHIL 1115	Introduction to Logic	4
PHIL 3435	Moral Philosophy	4
or PHIL 2325	Ancient Philosophy and Political Thought	
<i>Political Science</i>		
POLS 1160	International Relations	4
POLS 3405	International Political Economy	4
POLS 1150	American Government	4
or POLS 1155	Comparative Politics	
<i>Economics</i>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
or ECON 2316	Microeconomic Theory	
<b>Methods Course</b>		
PHIL 3000	Interdisciplinary Methods for PPE	4
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
PHIL 4550	Philosophy of Economics	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

## Major Electives

Code	Title	Hours
Complete two of the following:		8
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
PHIL 2000 to PHIL 5999		
POLS 2000 to POLS 5999		

## Concentration

Complete one of the following concentrations:

- Environment and Energy Policy (p. )
- International Political Economy (p. )
- Law and Justice (p. )
- Logic and Game Theory (p. )
- Political Philosophy (p. )
- Public and Economic Policy (p. )

## Supporting Courses

Code	Title	Hours
<b>Racial or Gender Justice</b>		
Complete one of the following:		4
AFAM/POLS 2360	Politics of Poverty	
CRIM 4010	Gender, Crime, and Justice	
HIST 1225	Gender, Race, and Medicine	
HIST 2000	Native American Resistance: Past and Present	
HUSV 3900	Social Policy	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 3500	Sexuality, Gender, and the Law	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL/WMNS 1260	Gender in a Changing Society	
SOCL 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	
WMNS 3100	Gender, Social Justice, and Transnational Activism	
WMNS/COMM 3304	Communication and Inclusion	
WMNS 3500	Sexuality, Gender, and the Law	
<b>Statistics and Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	
<b>Experiential Learning Requirement</b>		
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

### Major GPA/Credit Requirement

Complete 68 semester hours in the major with a 3.000 GPA.

Code	Title	Hours
<b>Economics GPA Requirement:</b>		
Grades in the following courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
or ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

### Course Distribution Requirement

Complete at least four courses in each of the following subject areas: ECON, PHIL, and POLS.

### 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 1291	Development Economics	
ECON 2316	Microeconomic Theory	
ECON 3290	History of the Global Economy	
ECON 3404	International Food 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	
Complete one of the following:		4
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 the European Union	

POLS 3465	Government and Politics in the Middle East
HIST 2011	Capitalism and Business: A Global History

#### CONCENTRATION IN LAW AND JUSTICE

Code	Title	Hours
Complete three of the following, only two of which may be POLS courses:		12
ECON 3424	Law and Economics	
ECON 1240	Economics of Crime	
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	
WMNS 3500	Sexuality, Gender, and the Law	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 1206	Drug Trade and Drug War. History, Security, Culture	
HIST 3335	History of Modern Terrorism	

#### CONCENTRATION IN LOGIC AND GAME THEORY

Code	Title	Hours
<b>Required Course</b>		
PHIL 1115	Introduction to Logic	4
<b>Electives</b>		
Complete two of the following:		8
ECON 4681	Information Economics and Game Theory	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 2050	Information and Uncertainty	
PHIL 4515	Advanced Logic	

#### CONCENTRATION IN POLITICAL PHILOSOPHY

Code	Title	Hours
<b>Politics Courses</b>		
Complete two of the following:		8
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Philosophy Course</b>		
Complete one of the following:		4
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3435	Moral Philosophy	

PHIL 3500	Sexuality, Gender, and the Law
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy

**CONCENTRATION IN PUBLIC AND ECONOMIC POLICY**

Code	Title	Hours
<b>Required Course</b>		
POLS 3307	Public Policy and Administration	4
<b>Elective Courses</b>		
Complete two of the following:		8
ECON 1240	Economics of Crime	
ECON 1281	Economics of the Creative Industries	
ECON 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 2331	The Civil War and Reconstruction	
HIST 2339	America's Gilded Age, 1865-1896	
HIST 3800	American Conservatism from the New Deal to the Present	
PHIL 1160	Introduction to Economic Justice	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 2340	Business and Government	
POLS 2360	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	

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops Summer 2/ Fall**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
PHIL 1160	4	ENGW 1111	4	Elective	4	Vacation
PHIL 1000	1	ECON 1116	4	Elective	4	
MATH 1231	4	PHIL 1115	4			
POLS 1160	4	PHIL 2303	4			
General Elective						

General Elective	4			
	17	16	8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	Statistics and Mathematics Requirement	4	Elective	4	Co-op	
POLS 1150 or 1155	4	ECON 2315 or 2316	4	Elective	4		
PHIL 3435 or 2325	4	Major Elective	4				
Supporting Course in Race or Gender Justice	4	Concentration Course	4				
	16		16		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL 3000	4	General Elective	4	Co-op	
		General Elective	4	General Elective	4		
		Major Elective	4				
		Concentration Course	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		Concentration Course	4	General Elective	4
		Capstone Requirement	4	General Elective	4
		General Elective	4		
		General Elective	4		
	0		16		8

Total Hours: 129

**Computational Social Science, Minor**

This minor introduces and develops the essential skills for employing mathematical, formal, and computational methods in the social sciences. Students completing this minor will have a grasp of the fundamentals necessary for pursuing more in-depth studies in the emerging fields of computational social science and big data. The foundational courses emphasize skills in probability, statistics, and introductory programming. Other courses focus on the application of formal and computational methods in the social sciences including digital analysis of texts, maps, and networks. An additional elective provides breadth in social scientific studies of computation or the foundational principles of logic and computation.



## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Foundational Courses

Code	Title	Hours
MATH 2280	Statistics and Software	4
or ECON 2350	Statistics	
or CRIM 3700	Analyzing and Using Data on Crime and Justice	
or SOCL 2320	Statistical Analysis in Sociology	
or POLS 2400	Quantitative Techniques	
or PSYC 2320	Statistics in Psychological Research	
INSH 1500	Digital Methods for Social Sciences and Humanities	4
or CS 2500	Fundamentals of Computer Science 1	
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

### Applications of Computational Approaches in the Social Sciences

Code	Title	Hours
Complete two courses from the following:		8
<i>(Students may complete a capstone project under the direction of a faculty member in lieu of an application course.)</i>		
COMM 2105	Social Networks	
DS 3000	Foundations of Data Science	
or DS 4200	Information Presentation and Visualization	
or DS 4300	Large-Scale Information Storage and Retrieval	
or DS 4400	Machine Learning and Data Mining 1	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
MISM 2301	Management Information Systems	
or MISM 2510	Fundamentals of Information Analytics	
PHIL 2001	Ethics and Evolutionary Games	
POLS 3310	Public Opinion, Voting, and Elections	
PPUA 5262	Big Data for Cities	

### Elective in Social Inquiry, Computation, and Logic

Code	Title	Hours
Complete one course from the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CS 2800	Logic and Computation	
ECON 4681	Information Economics and Game Theory	
IS 2000	Principles of Information Science	
PHIL 1115	Introduction to Logic	
or MATH 1215	Mathematical Thinking	
MATH 3081	Probability and Statistics	
PHIL 4515	Advanced Logic	
SOCL 4528	Computers and Society	

### GPA Requirement

2.000 GPA required in the minor

## Digital Methods in the Humanities, Minor

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Take two courses from each group and an additional course from either group.		20

#### Digital and Computational Methods

INSH 1500	Digital Methods for Social Sciences and Humanities	
or CS 2500	Fundamentals of Computer Science 1	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 3340	Technologies of Text	
COMM 2105	Social Networks	
JRNL 3610	Digital Storytelling and Social Media	
PHIL 2001	Ethics and Evolutionary Games	

#### Culture, Society, and Value in the Digital Age

PHIL 1145	Technology and Human Values	
COMM 1255	Communication in a Digital Age	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3340	Technologies of Text	
WMNS 2505	Digital Feminisms	
MSCR 3420	Digital Media Culture	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3418	Nationalism	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	

### GPA Requirement

2.000 GPA required in the minor

## Health, Humanities, and Society, Minor

The health, humanities, and society minor is designed for students who would like to learn how to think capaciously and creatively about health using the rigorous, precise, and flexible skills trained by the social sciences and the humanities. The social sciences teach students to think about the social, economic, and political factors that structure health conditions and outcomes in particular societies, while the humanities train students to navigate the complexities of interpersonal interaction and their ethical implications, to relate the micro to the macro and texts to contexts, to historicize encounters, to communicate accurately and effectively across a variety of media, and to engage in creative analytical thinking about healthcare. The landscape of healthcare is quickly changing, and this training will equip students well not only for the diverse forms of health work that exist today, but for as yet unimaginable varieties of health-related work in the future.



This minor is structured around the particular competencies that the social sciences and humanities train. Those competencies are narrative and historical perspective, critical attention and observation, ethics and judgment, performance and creativity, and social and structural proficiency. Rather than adopting the more traditional approach of connecting particular skills to particular disciplines (say, narrative to literature and observation to art history), this minor builds from discipline-specific health knowledge while training students to think across disciplines. Thus, it will not be unusual for students to find a single course addressing multiple competencies or to take courses in different disciplines that address the same competency from distinct but complementary perspectives.

This minor is housed in the Humanities Center of the College of Social Sciences and Humanities in partnership with the Bouvé College of Health Sciences.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

No more than two courses, in addition to the introductory course, may be taken under the 2000 level.

Code	Title	Hours
<b>Introductory Course</b>		
INSH 1300	Introduction to Health and Humanities	4
<b>Humanities Requirement</b>		
Complete two of the following:		8
ENGL 2770	Writing to Heal	
ENGL 3700	Narrative Medicine	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 4710	Capstone Seminar	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1295	Religious Perspectives on Health and Healing	
WMNS 1225	Gender, Race, and Medicine	
<b>Social Sciences Requirement</b>		
Complete two of the following:		8
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4580	Special Topics in Anthropology	
ECON 1230	Healthcare and Medical Economics	
HLTH 5280	The (in)Visibility of (dis)Ability in Society	
PHTH/SOCL 1120	Society and Health	
PHTH 1270	Introduction to Global Health	
PHTH 2300	Communication Skills for the Health Professions	
or PHTH 2301	Communication Skills for the Health Professions—Global	

PHTH 4120	Global Perspectives on Discrimination and Health
PHTH 5202	Introduction to Epidemiology
PHTH 5234	Economic Perspectives on Health Policy
SOCL 1295	Drugs and Society
SOCL 2303	Gender and Reproductive Justice
SOCL 3441	Sociology of Health and Illness

### GPA Requirement

2.000 GPA required in the minor

## Food Systems Sustainability, Health, and Equity, Minor

The minor in food systems sustainability, health, and equity is an interdisciplinary exploration of the contemporary food system, with particular attention to how the system evolved; its diverse societal, health, and environmental impacts; and ideas for making the food system more sustainable, healthy, and equitable for all.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Complete four courses from the list below. Two of the courses must be upper-level (numbered 3000 or higher). Only one course can be from the major.		16-17

#### Upper-Level Courses

ECON 3404	International Food Policy
ENTR 4506	Advanced Studies in Social Innovation Entrepreneurship
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300
ENVR 3150	Food Security and Sustainability
PPUA 4701	Food Systems Sustainability, Health, and Equity Practicum
PPUA 5263	Geographic Information Systems for Urban and Regional Policy
PPUA 5270	Food Systems and Public Policy

#### 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](mailto: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	Latin American Culture, History, and Politics	

### Culture and Literature Electives

Code	Title	Hours
Complete two of the following:		8
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 4655	Latin American Literature	
ENGL 2460	Multiethnic Literatures of the U.S.	
MUSC 1131	Music of Latin America and the Caribbean	

### History and Social Sciences Electives

*Note:* With the approval of the director of Latino/a, Latin American, and Caribbean Studies, up to four study-abroad or Dialogue of Civilization courses may be used toward the minor.

Code	Title	Hours
Complete two of the following:		8
ANTH 2365	Sport, Culture, and Society	
ANTH 4500	Latin American Society and Development	

HIST 1206	Drug Trade and Drug War: History, Security, Culture
SOCL 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.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
A grade of B or higher is required in the following two courses:		
LPSC 1101	Introduction to Law	4
LPSC 2301	Introduction to Law, Policy, and Society	4

### Law and Public Policy Course

Code	Title	Hours
Complete one of the following:		4
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
LPSC 3303	Topics in Law and Public Policy	
LPSC 3307	Understanding the Modern Supreme Court	
LPSC 4304	Advanced Debates in Law and Public Policy	

### Elective Courses

Code	Title	Hours
Complete two of the following courses not used to satisfy the requirements above:		8
AFAM 1225	Gender, Race, and Medicine	
AFAM 2339	Analysis of American Racism	
AFAM 2360	Politics of Poverty	
AFAM 2549	Public Policy and Black America	
ANTH 4580	Special Topics in Anthropology	
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 1412	Social Movement Communication	
COMM 2501	Communication Law	
COMM 2525	Communication and Privacy	
COMM 2551	Free Speech in Cyberspace	

COMM 2625	Communication, Technology, and Society	HIST 2308	Law, Justice, and Society in Modern China
COMM 3501	Free Speech: Law and Practice	HIST 2360	History of Capitalism in East Asia
CRIM 1300	The Death Penalty	HIST 3335	History of Modern Terrorism
CRIM 1400	Human Trafficking	HIST 3800	American Conservatism from the New Deal to the Present
CRIM 1500	Corruption, Integrity, and Accountability	HIST 5238	Managing Nonprofit Organizations
CRIM 2100	Criminal Due Process	HUSV 2800	Sexual Orientation and Gender Expression
CRIM 2200	Criminology	HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change
CRIM 3030	Global Criminology	HUSV 3580	Sexual Violence: Counseling, Programs, and Policy
CRIM 3040	Psychology of Crime	HUSV 3900	Social Policy
CRIM 3050	Organized Crime	INTL 3400	International Conflict and Negotiation
CRIM 3200	Youth Crime and Justice	JRNL 3550	The First Amendment and the Media
CRIM 3300	Punishment in the Age of Mass Incarceration	LPSC 2302	Global Human Rights: A Social and Economic Perspective
CRIM 3500	Policing a Democratic Society	LPSC 3303	Topics in Law and Public Policy
CRIM 4010	Gender, Crime, and Justice	LPSC 3307	Understanding the Modern Supreme Court
CRIM 4020	Race, Crime, and Justice	LPSC 4304	Advanced Debates in Law and Public Policy
CRIM 4040	Crime Prevention	LPSC 5201	Law and the City
CRIM 4100	Juvenile Law	MUSI 3335	Copyright Law for Musicians
CRIM 4120	Courts and Sentencing	PHIL 1160	Introduction to Economic Justice
CRIM 4500	Police Strategy	PHIL 1165	Moral and Social Problems in Healthcare
CRIM 4630	Political Crime and Terrorism	PHIL 1170	Business Ethics
CRIM 4660	Communities and Crime	PHIL 1180	Environmental Ethics
CRIM 4900	Advanced Seminar in Criminology and Criminal Justice	PHIL 1185	The Ethics of Food
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	PHIL 2301	Philosophical Problems of Law and Justice
ECON 1230	Healthcare and Medical Economics	PHIL 2303	Social and Political Philosophy
ECON 1240	Economics of Crime	PHIL 3500	Sexuality, Gender, and the Law
ECON 1260	Contested Issues in the U.S. Economy	POLS 2340	Business and Government
ECON 1291	Development Economics	POLS 2345	Urban Policies and Politics
ECON 3404	International Food Policy	POLS 2350	State and Local Politics
ECON 3405	A Critique of Capitalism	POLS 2355	Intergovernmental Relations
ECON 3410	Labor Economics	POLS 2356	Democratic Erosion
ECON 3412	Women's Labor and the Economy	POLS 2357	Growth and Decline of Cities and Suburbs
ECON 3414	Economics of Human Capital	POLS 2358	Current Issues in Cities and Suburbs
ECON 3420	Urban Economic Issues	POLS 2360	Politics of Poverty
ECON 3422	Economics of Transportation	POLS 2375	Gender and Politics
ECON 3423	Environmental Economics	POLS 2385	U.S. Health and Welfare Policy
ECON 3424	Law and Economics	POLS 2390	Science, Technology, and Public Policy
ENGL 3325	Rhetoric of Law	POLS 2395	Environmental Politics and Policy
ENGW 3311	Advanced Writing for Prelaw	POLS 3100	Gender, Social Justice, and Transnational Activism
ENVR 5210	Environmental Planning	POLS 3302	Judicial Process and Behavior
FINA 4312	Issues in Corporate Governance (for business students only)	POLS 3307	Public Policy and Administration
HIST 1206	Drug Trade and Drug War: History, Security, Culture	POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
HIST 2011	Capitalism and Business: A Global History	POLS 3324	Law and Society
HIST 2217	The Global Far-Right since 1945: Politics, Culture, Violence	POLS 3405	International Political Economy
HIST 2299	Uses and Abuses of History: Historical Reasoning in U.S. Global and Domestic Policy		
HIST 2303	Gender and Reproductive Justice		

POLS 3406	International Law
POLS 3408	International Security
POLS 3409	Global Governance
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties
PPUA 5264	Energy Democracy and Climate Resilience: Technology, Policy, and Social Change
SOCL 1228	Social Problems
SOCL 1241	Violence and Society
SOCL 1245	Sociology of Poverty
SOCL 1246	Environment and Society
SOCL 1260	Gender in a Changing Society
SOCL 1280	The Twenty-First-Century Workplace
SOCL 2268	Social Movements
SOCL 2270	Race and Ethnic Relations
SOCL 2303	Gender and Reproductive Justice
SOCL 3100	Gender, Social Justice, and Transnational Activism
SOCL 3485	Environment, Technology, and Society
SOCL 4514	"The Wire" and the Study of Urban Inequalities
SOCL 4518	Law and Society in a Digital World
WMNS 2303	Gender and Reproductive Justice
WMNS 3100	Gender, Social Justice, and Transnational Activism
WMNS 3500	Sexuality, Gender, and the Law

### GPA Requirement

3.000 GPA required in the minor

### Urban Studies, Minor

#### Overview

The urban studies minor offers students interested in cities an opportunity to take advantage of the resources of an urban university situated in a major metropolitan area. The minor seeks to equip students with an understanding of the dynamics of urban growth and development and includes the study of urban social and political institutions. Many courses cover climate change, sustainability, housing, and the urban economy. The minor complements many social science majors as well as architecture, business, and engineering. The minor is designed to provide a solid background for graduate study and professional careers in urban planning and policy, social work, and related fields.

#### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
POLS 2357	Growth and Decline of Cities and Suburbs	4
SOCL 2358	Current Issues in Cities and Suburbs	4

### Elective Courses

Code	Title	Hours
Complete two of the following:		
AFAM 2399	Black Community and Social Change	8
ANTH 2305	Global Markets and Local Culture	
ARCH 2330	Architecture and the City in the Nineteenth Century	
ARCH 2340	Modern Architecture	
ARCH 2550	Real Estate Development and Design	
ECON 1240	Economics of Crime	
ECON 3420	Urban Economic Issues	
ECON 3422	Economics of Transportation	
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2357	Growth and Decline of Cities and Suburbs	
POLS 2360	Politics of Poverty	
POLS 3307	Public Policy and Administration	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 4514	"The Wire" and the Study of Urban Inequalities	

### GPA Requirement

2.000 GPA required in the minor

### Women's, Gender, and Sexuality Studies, Minor

#### Overview

Northeastern offers an interdisciplinary minor for undergraduate students who wish to explore gender and sexuality in relation to other axes of power and identity, including race, class, ethnicity, and dis/ability. Women's, gender, and sexuality studies (WGSS) covers a wide variety of theoretical and empirical scholarship both within traditional disciplines and in cutting-edge, interdisciplinary frames. WGSS students have an opportunity to:

- Learn about approaches to gender and sexuality in the social sciences and humanities and through frameworks that bridge traditional fields
- Explore gender and sexuality in the global community by dipping into disciplines ranging throughout the social sciences, arts, humanities, and physical sciences
- Study politics and pop culture, sociology and psychology, writing and religion, and much more
- Open up new ways of thinking, bringing gender and sexuality studies to bear on important social and intellectual questions

For more information, visit the WGSS website (<http://www.northeastern.edu/wgss/>), or contact the program coordinator, 263 Holmes Hall, 617.373.4984, [wgss@northeastern.edu](mailto:wgss@northeastern.edu).

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified. Please note that special topics courses in some areas may also count as electives toward a WGSS minor in certain semesters, pending approval of the syllabus by the WGSS program director. In the case of cross-listed courses, students may enroll under any of the departmental designations, regardless of major or minor affiliation.

## Required Course

Code	Title	Hours
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	4

## Elective Courses

Code	Title	Hours
Complete three of the following:		12

At least one elective must be taken at the 2000 level or above and electives must be drawn from at least two different departments:

AFRS 3900 or WMNS 3900 or ENGL 3900	Gender and Black World Literatures
ANTH 2302 or WMNS 2302	Gender and Sexuality: A Cross-Cultural Perspective
COMM 2304 or WMNS 2304	Communication and Gender
COMM 3530	Communication and Sexualities
COMM 3610 or WMNS 3610	Communication, Politics, and Social Change
CRIM 4010 or WMNS 4010	Gender, Crime, and Justice
ECON 3412	Women's Labor and the Economy
ECON 5292	Gender and Development Economics
ENGL 2451 or WMNS 2451	Postcolonial Women Writers
ENGL 3676 or WMNS 3676	Representing Gender and Sexuality in Literature
ENGL 3678 or WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
HUSV 2800 or WMNS 2800	Sexual Orientation and Gender Expression
HUSV 3580 or WMNS 3580	Sexual Violence: Counseling, Programs, and Policy
INTL 2400	Politics of Islam and Gender
INTL 2480 or WMNS 2480	Women and World Politics

LING 3456	Language and Gender
MSCR 3392 or WMNS 3392	Gender and Film
MUSC 2340	Divas, DJs, and Double Standards
NRSRG 3302	Nursing with Women and Families
NRSRG 3303	Clinical for NRSRG 3302 (When taken with NRSRG 3302)
PHIL 1104 or WMNS 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1271 or WMNS 1271	Sex in Judaism, Christianity, and Islam
POLS 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
SOCL 1255 or WMNS 1255	Sociology of the Family
SOCL 1260 or WMNS 1260	Gender in a Changing Society
SOCL 4520 or WMNS 4520	Race, Class, and Gender
SOCL 4523 or WMNS 4523	Sexualities
THTR 2500 or WMNS 2501	Breaking the Glass Ceiling: Women in Theatre
THTR 3200 or WMNS 3200	Queer Theatre and Performance
WMNS 1101	Sex, Gender, and Popular Culture
WMNS 1225 or AFAM 1225 or HIST 1225	Gender, Race, and Medicine
WMNS 1990	Elective
WMNS 2303 or SOCL 2303 or HIST 2303	Gender and Reproductive Justice
WMNS 2373 or HIST 2373	Gender and Sexuality in World History
WMNS 2455 or AFAM 2455 or ENGL 2455	American Women Writers Race
WMNS 2505 or MSCR 2505	Digital Feminisms
WMNS 2990	Elective
WMNS 3100 or POLS 3100 or SOCL 3100	Gender, Social Justice, and Transnational Activism
WMNS 3500 or POLS 3500 or PHIL 3500	Sexuality, Gender, and the Law
WMNS 3990	Elective
WMNS 4990	Elective



WMNS 4992	Directed Study
WMNS 5240	Feminist Resistance
or HIST 5240	Feminist Resistance
or SOCL 5240	Feminist Resistance

### GPA Requirement

2.000 GPA required in the minor

## Asian Studies

Website (<http://www.northeastern.edu/asianstudies/>)

### Hua Dong, MA

Interim Director

H.Dong@northeastern.edu

201 Renaissance Park

The Asian Studies Program promotes a cosmopolitan understanding of the regional, national, and local cultures in the fastest-growing continent in the world. Our interdisciplinary program is based on an excellent core of faculty who are drawn from a range of departments (including languages, literatures, and cultures; English; history; music; political science; philosophy and religion; public policy; and sociology and anthropology) and the World Languages Center. Our students are strongly encouraged to accelerate their language acquisition process and gain firsthand knowledge of Asian cultures and societies through participation in a university-sponsored study-abroad program, an international co-op, a Dialogue of Civilizations program, or an experiential learning experience. Students can also take advantage of the outstanding Asian cultural resources available in the Boston metropolitan area, particularly at the Museum of Fine Arts and the Peabody Essex Museum in Salem.

### Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

### 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

#### Bachelor of Arts (BA)

- Asian Studies (p. 767)
- History and Asian Studies (p. 768)

#### Minor

- East Asian Studies (p. 769)

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Asian Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
ASNS 1150	East Asian Studies	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4
<b>Asia in Global Context</b>		
Complete one of the following:		4
ECON 3290	History of the Global Economy	
ENGL 2450	Postcolonial Literature	
INTL 2240	Global Population and Development	
POLS 3487	Politics of Developing Nations	

<b>Capstone</b>		
ASNS 4900	Asian Studies Capstone Directed Study	4

<b>International Experience</b>		
Complete a professional or academic experience abroad in consultation with your advisor.		

### Language and Elective Requirements

Code	Title	Hours
<b>Language Courses</b>		
Complete the following courses in either Chinese or Japanese:		16
<i>Chinese</i>		
Select one of the following:		
CHNS 1101	Elementary Chinese 1	
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
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Select one of the following:

CHNS 2102	Intermediate Chinese 2
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CHNS 2302	Intermediate Chinese Immersion 2
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#### Japanese

JPNS 1101	Elementary Japanese 1
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JPNS 1102	Elementary Japanese 2
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JPNS 2101	Intermediate Japanese 1
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or JPNS 2301	Intermediate Japanese Immersion 1
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JPNS 2102	Intermediate Japanese 2
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or JPNS 2302	Intermediate Japanese Immersion 2
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#### Asian Studies Electives

Complete six courses from the following focus areas. Choose at least three courses from one focus area: 24

##### History Focus Area

HIST 1246	World War II in the Pacific
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HIST 1252	Japanese Literature and Culture
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HIST 1500	Modern Chinese History and Culture
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HIST 2308	Law, Justice, and Society in Modern China
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HIST 2351	Modern Japan
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##### Society and Politics Focus Area

ANTH 4350	Ethnography of Southeast Asia
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ANTH 4515	Culture and Politics in Modern India
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ASNS 2245	The Asian-American Experience
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INTB 2501	Competing to Win in Emerging Markets
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MKTG 4220	Marketing in Asia
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PHIL 1130	Ethics: East and West
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INTL 2240	Global Population and Development
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POLS 3487	Politics of Developing Nations
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##### Language, Literature, and Culture Focus Area

ARCH 1320	Architecture and Global Cultures, 1400 to Present
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CLTR 1260	Japanese Film
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CLTR 1700	Introduction to Japanese Pop Culture
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ENGL 2450	Postcolonial Literature
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MUSC 2130	Music of Asia
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PHIL 1130	Ethics: East and West
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##### Religious Studies Focus Area

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
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PHIL 1290	Chinese Philosophy and Religion
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PHIL 2395	Japanese Buddhism
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PHIL 4393	Asian Religions in the United States
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PHIL 4545	Religion and Politics in South Asia
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### 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level except HIST 1215, which is required by Asian studies.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4
HIST 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 2370	Renaissance to Enlightenment	
HIST 1185	Introduction to Middle Eastern History	
HIST 1271	Ancient Rome	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
<b>Advanced History</b>		
Complete one history course 3000 level or above		4

## History Cluster

In conjunction with your history advisor, define a history cluster by the first semester of your junior year of study. A cluster comprises four history courses with no more than two courses in the 1200–1299 range. These courses may double-count in the requirements above (except History Colloquium).

## Asian Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
ASNS 1150	East Asian Studies	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4
<b>Asia in Global Context</b>		
Complete one of the following:		4
ECON 3290	History of the Global Economy	
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
<b>Language Courses</b>		
Complete the following courses in either Chinese or Japanese:		16
<i>Chinese</i>		
Select one of the following:		
CHNS 1101	Elementary Chinese 1	
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	
<i>Japanese</i>		
JPNS 1101	Elementary Japanese 1	
JPNS 1102	Elementary Japanese 2	
JPNS 2101	Intermediate Japanese 1	
or JPNS 2301	Intermediate Japanese Immersion 1	
JPNS 2102	Intermediate Japanese 2	
or JPNS 2302	Intermediate Japanese Immersion 2	

### Asian Studies Electives

Complete three courses from the following focus areas.		12
<i>Society and Politics Focus Area</i>		
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4515	Culture and Politics in Modern India	
ASNS 2245	The Asian-American Experience	
INTB 2501	Competing to Win in Emerging Markets	
MKTG 4220	Marketing in Asia	

PHIL 1130	Ethics: East and West	
INTL 2240	Global Population and Development	
POLS 3487	Politics of Developing Nations	
<i>Language, Literature, and Culture Focus Area</i>		
ARCH 1320	Architecture and Global Cultures, 1400 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	
<i>Religious Studies Focus Area</i>		
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
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	

## Integrative Requirement

Note: Public history concentrators satisfy this requirement within the concentration with Fieldwork in History 1 (HIST 4903).

Code	Title	Hours
HIST 2351	Modern Japan	4
or ASNS 2245	The Asian-American Experience	

## History and Asian Studies Major Credit Requirement

Complete 82 semester hours in the major.

## Program Requirements

128 total semester hours required

### East Asian Studies, Minor

East Asian studies minors can choose from either a nonlanguage or a language track. For the nonlanguage track, minors focus on gaining a broad interdisciplinary understanding of Asian societies, economies, politics, and cultures. The core course, East Asian studies, provides students with an understanding of the interlinkages in the historical, social, and political development of China, Korea, and Japan. Students can then choose from elective courses that represent a spectrum of disciplinary knowledge of Asian societies. For the language track, students are required to achieve at least first-year proficiency in an Asian language and also take East Asian studies and two elective courses of their choosing.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Complete either the nonlanguage track or the language track.

## Nonlanguage Track

Code	Title	Hours
<b>Core Course</b>		
ASNS 1150	East Asian Studies	4
<b>Elective Courses</b>		
Complete four of the following. They may include up to two courses taken as part of an approved study-abroad program:		16
ASNS 2245	The Asian-American Experience	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 1252	Japanese Literature and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
CHNS 1101	Elementary Chinese 1	
CHNS 1102	Elementary Chinese 2	
CHNS 2101	Intermediate Chinese 1	
CHNS 2301	Intermediate Chinese Immersion 1	
CLTR 1500	Modern Chinese History and Culture	
JPNS 1101	Elementary Japanese 1	
JPNS 1102	Elementary Japanese 2	
JPNS 2101	Intermediate Japanese 1	
CLTR 1700	Introduction to Japanese Pop Culture	
CLTR 1260	Japanese Film	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 2395	Japanese Buddhism	
PHIL 4545	Religion and Politics in South Asia	

## Language Track

Code	Title	Hours
<b>Core Course</b>		
ASNS 1150	East Asian Studies	4
<b>Required Courses</b>		
Complete the following two courses in either Chinese or Japanese:		8
<i>Chinese</i>		
CHNS 1101 and CHNS 1102	Elementary Chinese 1 and Elementary Chinese 2	
<i>Japanese</i>		
JPNS 1101 and JPNS 1102	Elementary Japanese 1 and Elementary Japanese 2	
<b>Elective Courses</b>		
Complete two of the following. They may include up to two courses taken as part of an approved study-abroad program:		8
ASNS 2245	The Asian-American Experience	
HIST 1253	History of Vietnam Wars	
HIST 1252	Japanese Literature and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
CLTR 1500	Modern Chinese History and Culture	
CHNS 2101	Intermediate Chinese 1	

CHNS 2301	Intermediate Chinese Immersion 1
CLTR 1700	Introduction to Japanese Pop Culture
CLTR 1260	Japanese Film
JPNS 2101	Intermediate Japanese 1
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 2395	Japanese Buddhism
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/>)

### Amy Farrell, PhD

Professor and Director

### Kevin Drakulich, PhD

Associate Professor and Associate 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. 27)."

### Programs

#### Bachelor of Arts (BA)

- English and Criminal Justice (p. 771)
- History and Criminal Justice (p. 773)
- International Affairs and Criminal Justice (p. 775)

#### Bachelor of Science (BS)

- Criminal Justice (p. 779)
- Computer Science and Criminal Justice (p. 336)
- Criminal Justice and Journalism (p. 201)
- Criminal Justice and Philosophy (p. 786)
- Criminal Justice and Political Science (p. 787)
- Criminal Justice and Psychology (p. 741)
- Criminal Justice and Sociology (p. 791)
- Cybersecurity and Criminal Justice (p. 380)
- Human Services and Criminal Justice (p. 795)

### Minor

- Criminal Justice (p. 797)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### English and Criminal Justice, BA

The Department of English and School of Criminology and Criminal Justice offer a combined major in English and criminal justice. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. English courses prepare students to analyze and interpret various representations of crime, criminality, the law, justice, and ethics in both literary and nonliterary texts as they study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures; analyze writing practices and related media; and practice a variety of approaches to the study of language, rhetoric, writing, and literature.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
	or ENGL 1410 Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	

ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Topics in Writing	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**English Electives**

Complete two additional ENGL electives. 8

**Criminal Justice Requirements**

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Understanding and Experiencing Criminal Justice Institutions and Systems</b>		
How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 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

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Crime Problems**

The following courses provide students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3540	Addiction and Recovery
CRIM 4630	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice

**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? Courses are project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

Complete one of the following: 4

CRIM 4040	Crime Prevention
CRIM 4120	Courts and Sentencing
CRIM 4300	Community-Based Corrections
CRIM 4500	Police Strategy

**Other Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
CRIM 1000	Criminal Justice at Northeastern	1
ENGL 1000	English at Northeastern	1
<b>Integrative Course</b>		
Complete one of the following:		4
ENGL 1120	Trouble in Utopia	
ENGL 3325	Rhetoric of Law	
ENGL 3426	Literature and Politics	

**Plan of Study**  
**Sample Four Years, One Co-op Plan**

Year 1						
Fall	Hours	Spring	Hours			
CRIM 1000 or ENGL 1000	1	ENGL 1160 or 1410	4			
ENGL 1111	4	CRIM 2100	4			
CRIM 1100	4	CRIM 2200	4			
ENGL 1400	4	Elective	4			
Current crime and justice issues CRIM course		4				
		17	16			
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Pre-19th-century ENGL	4	19th-, 20th-, or 21st-century ENGL	4	Elective	4	Elective
Systems and institutions CRIM course	4	Crime problems elective	4			
ENGL theory/methods	4	Elective	4			
Elective	4	Elective	4			
		16	16	4	4	4
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CRIM 3600	4	Co-op		Co-op		Elective
CRIM 3700	4					Elective
ENGL comparative literature	4					
ENGL writing	4					
		16	0	0	0	8
Year 4						
Fall	Hours	Spring	Hours			
Systemic issues CRIM elective	4	Solutions and reform course	4			
ENGL elective	4	ENGL diversity	4			
ENGL elective	4	Capstone	4			
Elective	4	Elective	4			
		16	16			

Total Hours: 129

**History and Criminal Justice, BA**

This combined major educates students in criminal justice and history, emphasizing the complementarity between these two disciplines. Students successfully completing this program will be able to critically



evaluate and draw connections between past and present practices in law, punishment, incarceration, justice, and the social institutions and cultural contexts in which these systems operate.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one other course from HIST 1001 to HIST 1999 (excluding HIST 1100, HIST 1200, and HIST 1201).		4
<b>Intermediate/Advanced Level</b>		
Complete four HIST courses numbered 2000 or above (excluding HIST 2301 and HIST 2302).		16
<b>Advanced Level</b>		
Complete one HIST course numbered 3000 or above.		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	

### Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Understanding and Experiencing Criminal Justice Institutions and Systems</b>		
How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 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	
<b>Creating Knowledge about Crime and Justice</b>		
How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.		
CRIM 3700	Analyzing and Using Data on Crime and Justice	4
<b>Crime Problems</b>		
The following courses offer students a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3540	Addiction and Recovery	
CRIM 4630	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
<b>Systemic Issues</b>		
A consideration of systemic issues facing the criminal justice system.		
Complete one of the following:		4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice
<b>Solutions and Reform</b>	
How do we reinvent criminal justice institutions and their practice? Courses are project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.	
Complete one of the following: 4	
CRIM 4040	Crime Prevention
CRIM 4120	Courts and Sentencing
CRIM 4300	Community-Based Corrections
CRIM 4500	Police Strategy

**Other Requirements**

Code	Title	Hours
A minimum of one history course must be taken between the methods and capstone requirements.		

<b>Methods</b>	
Complete one of the following: 4	
CRIM 3600	Criminal Justice Research Methods
HIST 2301	The History Seminar

<b>Capstone</b>	
Complete one of the following: 4	
HIST 4701	Capstone Seminar
CRIM 4949	Senior Capstone Seminar

<b>Integrative Course</b>	
HIST 1100	Law and History 4

**Program Requirements**

128 total semester hours required

**Plan of Study**

**Example plan of study with One Co-op**

Year 1			
Fall	Hours	Spring	Hours
HIST 1200	1	HIST 1100	4
HIST 1201	4	CRIM 2100	4
CRIM 1100	4	CRIM 2200	4
Current crime and justice issues CRIM course	4	Introductory-level history course	4
ENGW 1111	4		
17		16	

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
Systems and institutions CRIM course	4	Intermediate/advanced history elective	4	Elective	4
Pre-1800 history elective	4	Methods course	4	Elective	4
Intermediate history elective	4	Elective	4		

Elective	4	Elective	4				
16		16		8			
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CRIM 3700	4	Co-op		Co-op		Elective	4
Crime problems elective	4						
Intermediate/advanced history elective	4						
Elective	4						
EESH 2000	1						
17		0		0		4	
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Systemic issues CRIM elective	4	Solutions and reform CRIM course	4				
Intermediate/advanced history elective	4	Capstone	4				
Advanced history course	4	Elective	4				
Elective	4	Elective	4				
CRIM 3000	1	Elective	1				
17		17					

Total Hours: 128

**BA-IACJ: International Affairs and Criminal Justice, BA**

Through this combined major, successful undergraduates develop an awareness of crime and justice issues within their international, transnational, and global contexts since the early 20th century. The scope and sequence of international affairs courses provide students with a foundation in topics such as interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship). Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Upon graduation, students are equipped with the skills and knowledge needed to work across national cultures in fields that relate to understanding and addressing criminal behavior.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## International Affairs Requirements

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
ANTH 1101	Peoples and Cultures	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>International Affairs Elective</b>		
Complete one of the following:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4
<i>Environment</i>		
INTL 5100	Climate and Development	
ENVR 1110	Global Climate Change	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
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 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	

HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
INTL 3300	Covering Conflicts: Peace, War, and the Media
or JRNL 3300	Covering Conflicts: Peace, War, and the Media
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1390	History of Espionage 2: Cold War Spies
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
PHIL 5001	Global Justice
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
INTL 3200	Cities in a Global Context
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

**Development**

INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
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
JRNL 5360	Global Reporting
INTL 3300	Covering Conflicts: Peace, War, and the Media
or JRNL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global 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 two of the following, both of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

**Africa**

AFRS 2307	Africa Today
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
AFRS 2900	Swahili, Culture, and Politics in Kenya
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or 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
ENTR 3308	Business Economic History of South Africa

INTL 4510	Anthropology of Africa
or 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	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

INTL 4500	Latin American Society and Development
or ANTH 4500	Latin American Society and Development
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History

HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
HIST 1185	Introduction to Middle Eastern History
ECON 1292	Economic History of the Middle East
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

**Criminal Justice Requirements**

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	

**Understanding and Experiencing Criminal Justice Institutions and Systems**

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government
CRIM 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

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700 Analyzing and Using Data on Crime and Justice 4

**Crime Problems**

The following courses provide students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery
CRIM 4630	Political Crime and Terrorism

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice

**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? Courses are project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

Complete one of the following: 4

CRIM 4040	Crime Prevention
CRIM 4120	Courts and Sentencing
CRIM 4300	Community-Based Corrections
CRIM 4500	Police Strategy

**Introduction and Methods Options**

Code	Title	Hours
<b>Introduction</b>		
Complete one of the following:		1
INTL 1000	International Affairs at Northeastern	
CRIM 1000	Criminal Justice at Northeastern	

**Research Methods**

Complete one of the following:		4
INTL 2718	Research Methods in International Affairs	
CRIM 3600	Criminal Justice Research Methods	

**Supporting Courses**

Code	Title	Hours
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**Computer or Data Science**

Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000	Programming with Data	

**Co-op Integration Requirements**

Complete before the first co-op:		1
EESH 2000	Professional Development for Co-op	
Complete after the first co-op:		1
CRIM 3000	Co-op Integration Seminar 2	
Complete after the second co-op:		1
CRIM 4000	Co-op Integration Seminar 3	

**Integrative Requirement**

Code	Title	Hours
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**Integrative Course and Capstone**

CRIM 3030	Global Criminology	4
INTL 4700	Senior Capstone Seminar in International Affairs	4
or CRIM 4949	Senior Capstone Seminar	

**Combined-Major Credit Requirement**

Complete 84 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000 or CRIM 1000	1	ANTH 1101, HIST 2211, or HIST 2311	4	Elective	4	Elective (Dialogue of Civilizations possible)	4
INTL 1101	4	ECON 1115 or 1116	4	Elective	4	Elective (Dialogue of Civilizations possible)	4
ENGW 1111	4	CRIM thematic elective	4				
CRIM 1100	4	Foreign language course	4				
Foreign language course	4						
17		16		8		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	Co-op		Co-op		CRIM elective	4
CRIM 2100	4					INTL elective	4
CRIM 2200	4						
Foreign language course	4						
EESH 2000	1						
17		0		0		8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 2718 or CRIM 3600	4	Co-op		Co-op		INTL elective (Dialogue of Civilizations possible)	4
INTL 3400	4					Elective (Dialogue of Civilizations possible)	4
Foreign language course	4						
CRIM 1700	4						
CRIM 3000	1						
17		0		0		8	

**Year 4**

Fall	Hours	Spring	Hours
CRIM 3030	4	INTL 4700 or CRIM 4949	4
CRIM 3700	4	INTL elective	4
CRIM elective	4	CRIM elective	4
INTL elective	4	CRIM elective	4
CRIM 4000	1		
17		16	

Total Hours: 132

**Criminal Justice, BS**

The Bachelor of Science in Criminal Justice degree is designed to prepare students for professional and research careers in criminal justice, criminology, and related fields by applying multidisciplinary and comparative social science to understand, predict, and explain crime and contribute to the development of public policy 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Fundamentals

Code	Title	Hours
<b>Introduction to College</b>		
CRIM 1000	Criminal Justice at Northeastern	1
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Digital Skills</b>		
Successful students develop digital skills and master digital tools useful for careers related to crime and justice. Students choose one of two courses (each has a required lab). The computer science course introduces students to spreadsheets and databases. The data science course introduces students to programming with data.		
Complete one of the following (and the appropriate lab):		4 or 5
CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum (Social Science Practicum section)	

## Criminal Justice Institutions and Systems

Code	Title	Hours
<b>Understanding and Experiencing Criminal Justice Institutions and Systems</b>		

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete two of the following: 4

CRIM 2310	Courts: The Third Branch of Government
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

### Preparing for Co-op

The following course is designed to prepare students to apply for and embark on their first co-op. Students who do not take a co-op may replace EESH 2000, CRIM 3000, and CRIM 4000 with an additional CRIM elective.

EESH 2000 Professional Development for Co-op 1

## Crime Problems and Justice System Challenges

Code	Title	Hours
<b>Creating Knowledge about Crime and Justice</b>		
How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.		
CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

### Crime Problems

The following courses offer students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3540	Addiction and Recovery
CRIM 4630	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime

### Systemic Issues

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice

### Returning from Co-op

Allows students the opportunity to reflect on their co-op experience and its connection to their ongoing coursework and future plans:

CRIM 3000 Co-op Integration Seminar 2 (required after first co-op) 1

## Solutions and Reform

Code	Title	Hours
<b>Solutions and Reform</b>		
How do we reinvent criminal justice institutions and their practice? Courses are project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.		
Complete one of the following:		4
CRIM 4040	Crime Prevention	
CRIM 4120	Courts and Sentencing	
CRIM 4300	Community-Based Corrections	
CRIM 4500	Police Strategy	

### Student-Generated Knowledge

Opportunities for student research (optional):		
CRIM 4991	Research	
CRIM 4970	Junior/Senior Honors Project 1 (may serve as a substitute for the 'Solutions and Reform' requirement)	
CRIM 4971	Junior/Senior Honors Project 2	

### Returning from Co-op

Allows students the opportunity to reflect on their co-op experience and its connection to their ongoing coursework and future plans:		
CRIM 4000	Co-op Integration Seminar 3	1

### Criminal Justice Electives

Rounding out knowledge of crime and justice.		
Complete four additional criminal justice electives. Three must be 3000-level or higher (including 5000-level).		16

## Criminal Justice Sequence Requirements

Complete three courses from the same department, two of which must be numbered 2000 or above, or complete a minor.

## Criminal Justice Credit Requirement

Complete 63 credit hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, One Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000	1	CRIM 2100	4	Elective	4	Vacation	
CRIM 1100	4	CRIM 2200	4				
Current crime and justice issues course	4	Digital skills course and lab	5				
ENGW 1111	4	Elective	4				
Elective	4						
		17	17		4		0

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Systems and institutions course	4	Systems and institutions course	4	Elective	4	Vacation	0
CRIM elective	4	CRIM 3600	4				
Sequence elective	4	CRIM elective	4				
Elective	4	Elective	4				
		16		16		4	
						0	

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3700	4	Co-op	0	Co-op	0	Elective	4
Crime problems elective	4						
Systemic issues elective	4						
Elective	4						
EESH 2000	1						
		17		0		0	
						4	

### Year 4

Fall	Hours	Spring	Hours
CRIM elective	4	Solutions and reform course	4
Sequence elective	4	CRIM elective	4
Elective	4	Sequence elective	4
Elective	4	Elective	4
CRIM 3000	1		
		17	
		16	

Total Hours: 128

## Four Years, Two Co-ops

### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000	1	CRIM 2100	4	Sequence elective	4	Elective	4
CRIM 1100	4	CRIM 2200	4	Elective	4		
Current crime and justice issues course	4	Digital skills course and lab	4				
ENGW 1111	4	Elective	4				
Elective	4						
		17		16		8	
						4	

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Systems and institutions course	4	Systems and institutions course	4	Elective	4	Co-op	

CRIM elective	4	CRIM 3600	4	Elective	4		
Sequence elective	4	CRIM elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
	16		17		8		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		CRIM 3700	4	CRIM elective	4		
		Crime problems elective	4	Elective	4		
		Systemic issues elective	4				
		Elective	4				
		CRIM 4000	1				
	0		17		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
		Solutions and reform course	4				
		CRIM elective	4				
		Sequence elective	4				
		Elective	4				
		CRIM 4000	1				
	0		17				

Total Hours: 128

## Computer Science and Criminal Justice, BS

For students interested in criminal justice in an increasingly digital world, the computer science and criminal justice combined degree offers a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. 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. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
	or CRIM 2000 Co-op Integration Seminar 1	
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:		16
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Criminal Justice Courses</b>		
Code	Title	Hours
<b>Criminal Justice Required Courses</b>		
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	Analyzing and Using Data on Crime and Justice	4
<b>Criminal Justice Required Capstone</b>		
CRIM 4949	Senior Capstone Seminar	4
<b>Thematic Elective</b>		
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	
<b>Survey Elective</b>		

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 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
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**Integrative Course Requirement**

Code	Title	Hours
Complete one course from the following:		4
CRIM 4040	Crime Prevention	
CRIM 4630	Political Crime and Terrorism	
CRIM 4900	Advanced Seminar in Criminology and Criminal Justice	

**Supporting Course**

Code	Title	Hours
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	

ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUPath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, 2 Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 1800 and CS 1802	5	IS 2000	4	CS 3500	4		
CS 2500 and CS 2501	5	CRIM 2100	4				
CRIM 1100	4	CRIM 2200	4				
ENGW 1111	4						
		19		17		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210 or CRIM 2000	1	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
CS 3000	4					Elective	4
CRIM 3600	4						
CJ thematic elective	4						
Elective	4						
		17		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
CRIM 3700	4					Elective	4
CJ survey elective	4						
Khoury elective 2	4						
THTR 1170	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Khoury elective 3	4	Khoury elective 4	4	Elective	4
CJ system-wide elective	4	CRIM 4949	4	Elective	4
CJ elective	4	Elective	4		
Computing and social issues	4	CJ integrative course	4		
	16		16		8

Total Hours: 134

**Five Years, 3 Co-ops in Spring/Summer 1****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	IS 2000	4				
CS 2500 and CS 2501	5	CRIM 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, 3308, or 3315	4
Khoury elective 1	4					Elective	4
CJ thematic elective	4						
CJ survey elective	4						

THTR 1170	1				
	17	0	0		8

  

Year 4	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 2	4	Co-op		Co-op		Elective	4
CJ system-wide elective	4					Elective	4
Elective	4						
Computing and social issues	4						
	16		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
CJ integrative course	4	Khoury elective 4	4
CJ elective	4	CRIM 4949	4
Elective	4	Elective	4
Khoury elective 3	4	Elective	4
	16		16

Total Hours: 134

**Criminal Justice and Journalism, BS**

The School of Criminology and Criminal Justice and School of Journalism offer a combined major in criminal justice and journalism. Criminology and criminal justice courses provide a foundation for understanding crime and our criminal justice system. Journalism courses provide students with the skills and experience needed to succeed as a journalist. Together, the combined major prepares students to report important stories about crime and justice.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Criminal Justice Requirements**

Code	Title	Hours
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	Analyzing and Using Data on Crime and Justice	4

**Capstone**

CRIM 4949	Senior Capstone Seminar	4
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**Thematic Elective**

Complete one course in the following range:	4
CRIM 1300 to CRIM 1500	

**Survey Elective**

Complete one course in the following range:	4
CRIM 3010 to CRIM 3500	

**System-Wide Elective**

Complete one course in the following range:	4
CRIM 4010 to CRIM 4040	

**Criminal Justice Elective**

Complete one additional CRIM course.	4
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**Journalism Requirements**

Code	Title	Hours
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**Introductory Journalism Course**

JRNL 1150	Understanding Today's News	4
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**Journalism Foundation Courses**

A grade of C or better is required.

JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
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JRNL 2201	Journalism 2: Intermediate Reporting	4
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JRNL 2301	Visual Storytelling in Journalism	4
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JRNL 3610	Digital Storytelling and Social Media	4
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**Ethics**

JRNL 4650	Ethics and Issues in Journalism	4
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**Journalism Electives**

Code	Title	Hours
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Complete three additional journalism courses. 12

**Supporting Courses**

Code	Title	Hours
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**Introduction**

CRIM 1000 or JRNL 1000	Criminal Justice at Northeastern / Journalism at Northeastern	1
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**Computer or Data Science**

Complete one of the following: 4

CS 1100	Computer Science and Its Applications	
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DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
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JRNL 3700	Data Storytelling	
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**Co-op Integration Requirements**

Complete before the first co-op:

EESH 2000 or EEAM 2000	Professional Development for Co-op	
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Complete after a criminal justice co-op:

CRIM 3000	Co-op Integration Seminar 2	
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**Integrative Requirements**

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
CRIM 1700	Crime, Media, and Politics	4

**Program Requirement**

129 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops**

**Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000 or JRNL 1000	1	CRIM thematic elective	4	Elective	4	Elective	4
CRIM 1100	4	JRNL 2201	4	Elective	4	Elective	4
JRNL 1150	4	Computer or data requirement	4				
JRNL 1101 and JRNL 1102	5	Elective	4				
ENGW 1111	4						
		18			16		
						8	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 2100	4	Co-op		Co-op		CRIM survey elective	4
CRIM 2200	4					Elective	4
JRNL 3550	4						
Journalism elective 1	4						
EESH 2000 or EEAM 2000	1						
		17			0	0	
						0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1700	4	Co-op		Co-op		Elective	4
CRIM 3600	4					Elective	4
JRNL 2301	4						
Journalism elective 2	4						
CRIM 3000	1						
		17			0	0	
						0	8

**Year 4**

Fall	Hours	Spring	Hours
CRIM 3700	4	CRIM 4949	4
CRIM system-wide elective	4	CRIM elective	4
JRNL 3610	4	JRNL 4650	4



Journalism elective 3	4 Elective	4
	16	16

Total Hours: 132

## Criminal Justice and Philosophy, BS

The School of Criminology and Criminal Justice and the Department of Philosophy and Religion offer a combined major in criminal justice and philosophy. This combined major educates students in criminal justice and philosophy and in the interface between the two disciplines. The scope and sequence of philosophy courses provide students with a foundation in topics such as social and political philosophy, philosophy of law, and moral philosophy, while also developing robust analytical and evaluative skills. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should have depth of knowledge with respect to analyzing and addressing criminal behavior, as well as with respect to the philosophical and ethical aspects of topics such as law, punishment, justice, and social institutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Criminal Justice Major Requirements

Code	Title	Hours
<b>Criminal Justice Required Courses</b>		
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	Analyzing and Using Data on Crime and Justice	4

### Co-op Integration Seminars

Co-op students should complete the seminars below. Non-co-op students should complete a 4-semester-hour CRIM elective.

Complete two of the following courses. CRIM 2000 and CRIM 3000 are required for the first co-op. CRIM 4000 is required if a second co-op is taken.

CRIM 2000	Co-op Integration Seminar 1	2-4
CRIM 3000	Co-op Integration Seminar 2	
CRIM 4000	Co-op Integration Seminar 3	

### Capstone

CRIM 4949	Senior Capstone Seminar	4
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### 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 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 additional CRIM course. 4

### Philosophy Requirements

Code	Title	Hours
<b>Required Courses</b>		
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 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 3360	Scientific Approaches to Philosophy
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy 4000/5000 Elective**

Complete one of the following not used to satisfy previous requirements: 4

PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete two additional PHIL courses. 8

**Integrative Requirement**

Code	Title	Hours
<b>Philosophy Integrative Course</b>		
PHIL 2301	Philosophical Problems of Law and Justice	4
<b>Criminal Justice Integrative Course</b>		
CRIM 1400	Human Trafficking	4

**Criminal Justice and Philosophy Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1100	4	CRIM 2100	4	Elective	4	Vacation	
PHIL 1115	4	CRIM 2200	4	Elective	4		
ENGW 1111	4	PHIL 2325 or POLS 2325	4				
PHIL 1000	1	PHIL 2303	4				
CRIM thematic elective	4						
		17			16		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3600	4	CRIM thematic elective	4	Vacation	4	Co-op	
CRIM 2000	1	Elective	4				
PHIL 2330	4	Elective	4				
CRIM survey elective	4	PHIL intermediate/advanced elective	4				

PHIL intermediate/advanced elective	4						
		17			16		

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CRIM 3700	4	Elective	4	Co-op	
		CRIM 3000	1	Elective	4		
		PHIL 4000/5000 elective	4				
		CRIM system-wide elective	4				
		PHIL 4000/5000 elective	4				
		0			17		

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CRIM elective	4	Vacation	4	Co-op	
		PHIL 2301	4				
		CRIM 1400	4				
		PHIL elective	4				
		CRIM 4000	1				
		0			17		

**Year 5**

Fall	Hours	Spring	Hours
Co-op		PHIL capstone	4
		CRIM 4949	4
		PHIL intermediate/advanced elective	4
		Elective	4
		0	16

Total Hours: 132

**Criminal Justice and Political Science, BS**

This combined major educates students in criminal justice and political science and in the interface between the two disciplines. The scope and sequence of political science courses provide students with a foundation in topics such as American government, comparative politics, international relations, and security and resilience. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the relationships between the fields as they relate to understanding and addressing criminal behavior.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Criminal Justice Requirements

Code	Title	Hours
<b>Criminal Justice Core Requirements</b>		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
<b>Thematic Electives</b>		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Survey Elective</b>		
Complete one of the following:		4
CRIM 3010 to CRIM 3500		
<b>System-Wide Elective</b>		
Complete one of the following:		4
CRIM 4010	Gender, Crime, and Justice	
CRIM 4020	Race, Crime, and Justice	
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

## Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

## Research Methods and Electives

Complete Option A, Option B, or Option C, below. *Note:* These options enable the student to take research methods courses (including statistics/quantitative techniques) as either CRIM courses or as POLS courses.

### OPTION A

Code	Title	Hours
<i>Research Methods</i>		
CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4
<i>Criminal Justice Electives</i>		
Complete two courses in the following range:		8
CRIM 4001 to CRIM 4999		
<i>Political Science Electives</i>		
Complete five courses in the following range:		20
POLS 2000 to POLS 5999		

### OPTION B

Code	Title	Hours
<i>Research Methods</i>		
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<i>Criminal Justice Electives</i>		
Complete three courses in the following range:		12
CRIM 4001 to CRIM 4999		
<i>Political Science Electives</i>		
Complete four courses in the following range:		20
POLS 2000 to POLS 5999		

### OPTION C

Code	Title	Hours
<i>Research Methods</i>		
Complete one of the following sequences:		8
CRIM 3600 and POLS 2400	Criminal Justice Research Methods and Quantitative Techniques	
CRIM 3700 and POLS 2399	Analyzing and Using Data on Crime and Justice and Research Methods in Political Science	
<i>Criminal Justice Electives</i>		
Complete two courses in the following range:		8
CRIM 4001 to CRIM 4999		
<i>Political Science Electives</i>		
Complete four courses in the following range:		20
POLS 2000 to POLS 5999		

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. 789).

- American Political Institutions (p. 789)
- Campaigns and Elections (p. 789)
- Comparative Politics (p. 789)
- Identity, Culture, and Politics (p. 789)
- International Relations and Diplomacy (p. 789)

- Law and Legal Studies (p. 790)
- Public Policy (p. 790)
- Security Studies (p. 790)

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone Requirement</b>		
CRIM 4949	Senior Capstone Seminar	4
or POLS 4701	Political Science Senior Capstone	
<b>Due Process</b>		
CRIM 2100	Criminal Due Process	4
<b>Integrative Elective Courses</b>		
Complete two of the following:		8
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

**Political Science Concentrations (Optional)**

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Criminal Justice and Psychology, BS**

This combined major educates students in criminal justice and psychology and the interface between the two disciplines. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including the biological and psychosocial bases of behavior, learning, personality, and cognition. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the

relationships between the fields, as they relate to understanding and addressing criminal behavior.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Criminal Justice Requirements**

Code	Title	Hours
<b>Criminal Justice Core Requirements</b>		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
CRIM 3600	Criminal Justice Research Methods	4
<b>Thematic Elective</b>		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Survey Elective</b>		
Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3050	Organized Crime	
CRIM 3200	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	
<b>System-Wide Elective</b>		
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
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**Mathematics**

Complete one of the following:		4
MATH 1215	Mathematical Thinking	

MATH 1231	Calculus for Business and Economics
MATH 1241	Calculus 1

**Electives**

Complete two courses in the following range:	8
CRIM 4000 to CRIM 5999	

**Psychology Requirements**

Code	Title	Hours
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**Introductory Course**

PSYC 1101	Foundations of Psychology	4
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**Statistics**

PSYC 2320	Statistics in Psychological Research	4
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**Personality/Social Bases of Behavior**

Complete two of the following:	8
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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
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PSYC 3450	Learning and Motivation	
or PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	

**Research Experience**

Complete one of the following:	4
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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
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PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

**Electives**

Complete two PSYC courses.	8
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**Integrative Requirement**

Code	Title	Hours
CRIM 3040	Psychology of Crime	4

**Criminal Justice and Psychology Combined-Major Credit Requirement**

Complete 84 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Criminal Justice and Sociology, BS**

This combined major educates students in criminal justice and sociology and in the interface between the two disciplines. The scope and sequence of sociology courses provide students with a foundation in social theory and social systems. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students successfully completing this program should be able to understand the ways that crime and the justice system are situated in larger social systems and structures.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Criminal Justice Requirements**

Code	Title	Hours
<b>Criminal Justice Core Requirements</b>		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4

**Thematic Elective**

Complete one course in the following range:	4
CRIM 1300 to CRIM 1700	

**Survey Elective**

Complete one course in the following range:	4
CRIM 3010 to CRIM 3500	

**System-Wide Elective**

Complete one course in the following range:	4
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CRIM 4010 to CRIM 4040

<b>Criminal Justice Electives</b>	
Complete two additional CRIM courses.	8

**Sociology Requirements**

Code	Title	Hours
Complete a minimum of nine courses in sociology from the requirements below.		

<b>Sociology Requirements</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4

<b>Sociology Introductory Electives</b>	
Complete two courses in the following range:	8
SOCL 1200 to SOCL 1999	

<b>Sociology Intermediate Electives</b>	
Complete two courses in the following range:	8
SOCL 2000 to SOCL 3999	

<b>Sociology Advanced Elective</b>	
Complete one course in the following range:	4
SOCL 4000 to SOCL 5999	

**Introduction, Methods, and Statistics**

Code	Title	Hours
<b>Introduction</b>		

Complete one of the following:	1	
CRIM 1000	Criminal Justice at Northeastern	
SOCL 1000	Sociology at Northeastern	

<b>Research Methods</b>		
SOCL 2321	Research Methods in Sociology	4

<b>Statistics</b>		
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Supporting Courses**

Code	Title	Hours
<b>Computer or Data Science</b>		

Complete one of the following:	4	
CS 1100	Computer Science and Its Applications	4
or DS 2000	Programming with Data	
and DS 2001	and Data Science Programming Practicum	

<b>Mathematics</b>		
Complete one of the following:	4	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

<b>Co-op Integration Requirements</b>		
Complete before the first co-op:	1	
EESH 2000	Professional Development for Co-op	

Complete after the first co-op:	1	
CRIM 3000	Co-op Integration Seminar 2	

Complete after the second co-op:	1	
CRIM 4000	Co-op Integration Seminar 3	

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone Requirement</b>		

CRIM 4949	Senior Capstone Seminar	4
or SOCL 4600	Senior Seminar	

<b>Integrative Elective Courses</b>	
Complete one of the following:	4

CRIM 3030	Global Criminology	
CRIM 4010	Gender, Crime, and Justice	
CRIM 4020	Race, Crime, and Justice	

Complete one of the following:	4	
SOCL 1245	Sociology of Poverty	
SOCL 1228	Social Problems	

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000 or SOCL 1000	1	SOCL 3300	4	Vacation	0	Elective	4
CRIM 1100	4	Criminology thematic elective	4			Elective	4
SOCL 1101	4	Sociology introductory elective	4				
CS 1100 or DS 2000	4	Elective	4				
MATH 1215	4						
		17			16		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 2100	4	Co-op		Co-op		Criminology survey elective	4
CRIM 2200	4					Sociology intermediate elective	4
Sociology introductory elective	4						
Elective	4						
EESH 2000	1						
		17			0	0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3600 or SOCL 2321	4	Co-op		Co-op		Elective	4
CRIM 3700 or SOCL 2320	4					Criminal justice elective	4
Elective	4						

Elective	4			
CRIM 3000	1			
	17	0	0	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Criminology system-wide elective	4	CRIM 4949 or SOCL 4600	4	Elective	4
Sociology advanced elective	4	Integrative course 2	4		
Integrative course 1	4	Elective	4		
Criminal justice elective	4	Elective	4		
	16		16		4

Total Hours: 127

## Cybersecurity and Criminal Justice, BS

The cybersecurity and criminal justice combined degree applies a multidisciplinary approach to ensuring the reliability and security of cyberspace. The program will provide students with a strong programming foundation coupled with academic and experiential knowledge of the criminal justice system. Students learn how social behavior, policy, and legal rules can affect cybersecurity and utilize comparative social science to understand, predict, and explain crime.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or CRIM 1000	First Year Seminar Criminal Justice at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
<b>Computer Science Required Courses</b>		

CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4

### Cybersecurity Required Courses

CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4

### Cybersecurity Elective

Complete one of the following: 4

CS 2800	Logic and Computation	
CS 4710 or CS 6710	Mobile and Wireless Systems Wireless Network	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 4770	Cryptography	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
CY 5200	Security Risk Management and Assessment	
CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
IS 4300	Human Computer Interaction	
EECE 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	
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	The Eloquent Presenter	1
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### Supporting Courses

Code	Title	Hours
MATH 1341	Calculus 1 for Science and Engineering	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
Complete one of the following:		4
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Criminal Justice Requirements**

Code	Title	Hours
<b>Core Requirements</b>		
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	Analyzing and Using Data on Crime and Justice	4
<b>Thematic Elective</b>		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Survey Elective</b>		
Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3200	Youth Crime and Justice	
CRIM 3300	Punishment in the Age of Mass Incarceration	
<b>System-Wide Elective</b>		
Complete one of the following:		4
CRIM 4010	Gender, Crime, and Justice	
CRIM 4020	Race, Crime, and Justice	
<b>Criminal Justice Elective</b>		
Complete one CRIM course.		4
<b>Criminal Justice Capstone</b>		
Complete one of the following:		4
CRIM 4949	Senior Capstone Seminar	
CY 4930	Cybersecurity Capstone	
CY 4940	Research Projects on National Security	

**Criminal Justice Co-op Integration**

Code	Title	Hours
Co-op students should complete at least one of the following courses. CRIM 3000 is required for the first co-op. CRIM 4000 is required if a second co-op is taken:		
CRIM 3000	Co-op Integration Seminar 2	1
CRIM 4000	Co-op Integration Seminar 3	1

**Integrative Requirement**

Code	Title	Hours
<b>Cybersecurity Integrative Course</b>		
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	4
or CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
<b>Criminal Justice Integrative Course</b>		
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 Sector	
CRIM 3500	Policing a Democratic Society	
CRIM 5900	Topics in Criminal Justice and Criminology	

**Required General Electives**

Code	Title	Hours
Complete 24 credits of general electives.		24

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses.

**Program Requirement**

133 total semester hours required.

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	CY 2550	4				
CS 2500 and CS 2501	5	CRIM 2100	4				
CRIM 1100	4	CRIM 2200	4				
ENGW 1111	4						
		19			17		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3500	4	CS 3000	4	Vacation		Co-op	
CS 3650	4	CS 1210	1				
MATH 1341	4	CS 3700	4				
CRIM 3600	4	CRIM 3700	4				

		CRIM Elective: Thematic	4				
	16		17	0			0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		CY 3740	4	General Elective		4	Co-op
		CRIM 3000	1	General Elective		4	
		CRIM Elective: Survey	4				
		CRIM Elective: System-wide	4				
		General Elective	4				
	0		17		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		CY 4740	4	ENGW 3302		4	Co-op
		CY 4170	4	General Elective		4	
		CRIM 4000	1				
		CRIM Integrative Course	4				
		General Elective	4				
	0		17		8		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op		THTR 1170	1				
		Capstone	4				
		Cybersecurity Elective	4				
		CRIM Elective: General	4				
		General Elective	4				
	0		17				

Total Hours: 136

## Human Services and Criminal Justice, BS

A combined major in human services and criminal justice appeals to students interested in the intersection of social and legal issues and institutions. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. Students with criminal justice course work gain a rigorous interdisciplinary and experiential education in the causes and consequences of crime and the responses of criminal justice. The addition of human services course work complements a criminal justice perspective and considers the role of social services and community-based organizations to prevent, intervene, and treat the causes and consequences of crime.

The degree allows students to combine interests in the justice system, political advocacy, and community development. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Foundation Courses

Code	Title	Hours
<b>Introduction to the Major</b>		
CRIM 1000	Criminal Justice at Northeastern	1
or HUSV 1000	Human Services at Northeastern	
<b>Criminal Justice Foundation Courses</b>		
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
<b>Human Services Foundation Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4

### Upper-Level Courses

Code	Title	Hours
<b>Human Services Upper Level Courses</b>		
HUSV 3900	Social Policy	4
<b>Human Services Elective</b>		
Complete one course from the HUSV subject code.		4
<b>Survey Electives</b>		
Complete two of the following:		8
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
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

**Research Methods**

CRIM 3600	Criminal Justice Research Methods	4
or HUSV 2970	Research Methods for Human Services	

**Criminal Justice Elective**

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice
CRIM 4040	Crime Prevention

**Statistics**

Complete one of the following: 4

CRIM 3700	Analyzing and Using Data on Crime and Justice
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	

**Major Electives**

Code	Title	Hours
Complete seven courses. Two of these courses must be in criminal justice and four must be in human services.		28

**Cooperative Education for Criminal Justice**

Code	Title	Hours
<b>Co-op Integration Seminar 1/Professional Development</b>		
All students should complete one of the following: 1		
CRIM 2000	Co-op Integration Seminar 1	
EESH 2000	Professional Development for Co-op	

**Co-op Integration Seminars 2 and 3**

Co-op students should complete the following:		
CRIM 3000	Co-op Integration Seminar 2	1
CRIM 4000	Co-op Integration Seminar 3	1

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 1300, 1400, 1500, or 1700	4	Vacation	0	Vacation	0

CRIM 1100	4	HUSV 2300	4
HUSV 1101	4	CS 1100	4
ENGW 1111	4	HSVC elective	4
MATH 1215	4		

17 16 0 0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 2100	4	CRIM 2000	1	Vacation	0	Co-op	0
CRIM 2200	4	CJ concentration elective	4				
HSVC intermediate/advanced undergraduate elective	4	CJ concentration elective	4				
Elective	4	Elective	4				
		Elective	4				

16 17 0 0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CRIM 3000	1	CRIM 3600	4	Co-op	0
		Elective	8	Elective	4		
		HUSV 3900	4				
		HSVC organization course	4				

0 17 8 0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CRIM 4000	1	Elective	4	Co-op	0
		CJ system-wide elective	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		CRIM 3700	4				

0 17 8 0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	HUSV 4994	6
		Elective	4
		CRIM 4949 or HUSV 4700	4
		Elective	4

0 18

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	CRIM 1300, 1400, 1500, or 1700	4	Vacation	0	Vacation	0

CRIM 1100	4	HUSV 2300	4
HUSV 1101	4	CS 1100	4
ENGW 1111	4	HSVC elective	4
MATH 1215	4		
	17	16	0

**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						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CJ concentration elective	4	Co-op	0	Co-op	0	Elective	4
CJ concentration elective	4					HUSV 3900	4
Elective	4						
Elective	4						
CRIM 3000	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3600	4	Co-op	0	Co-op	0	Vacation	0
HSVC organization course	4						
CJ system-wide elective	4						
Elective	4						
CRIM 4000	1						
	17		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
CRIM 3700	4	Elective	4
HUSV 4994	6	Elective	4
ENGW 3315	4	CRIM 4949 or HUSV 4700	4
Elective	4	Elective	4
	18		16

Total Hours: 134

**Criminal Justice, Minor**

Minors in the School of Criminology and Criminal Justice (SCCJ) take the foundational courses in criminology and criminal justice. Minors can also specialize further in their elective courses. These may include courses covering topics such as policing democratic societies, corporate security, punishment and mass incarceration, and juvenile justice. A

minor in criminology and criminal justice in combination with a student's major can enhance the student's career possibilities and open new avenues for research experiences.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4

**Criminal Justice Electives**

Code	Title	Hours
Complete two of the following:		
CRIM 3010	Criminal Violence	4
CRIM 3030	Global Criminology	4
CRIM 3040	Psychology of Crime	4
CRIM 3050	Organized Crime	4
CRIM 3200	Youth Crime and Justice	4
CRIM 3300	Punishment in the Age of Mass Incarceration	4
CRIM 3400	Corporate Security: Securing the Private Sector	4
CRIM 3500	Policing a Democratic Society	4
CRIM 4010	Gender, Crime, and Justice	4
CRIM 4020	Race, Crime, and Justice	4
CRIM 4040	Crime Prevention	4
CRIM 4100	Juvenile Law	4
CRIM 4120	Courts and Sentencing	4
CRIM 4500	Police Strategy	4
CRIM 4630	Political Crime and Terrorism	4

**GPA Requirement**

2.000 GPA required in the minor

**Cultures, Societies, and Global Studies**

The Department of Cultures, Societies, and Global Studies is an open and dynamic academic platform for interdisciplinary research and teaching on the transformative power of culture as an instrument for social change and innovation. We approach the challenges facing humanity through perspectives that are primarily, though not exclusively, informed by the experiences of the peoples from the Global South (Africa, Asia, the Caribbean, and Latin America) and its diasporas. As we search for the tools to foster sustainable economic growth and social well-being on a global scale, we aim to reevaluate and learn from the historical experiences, belief systems, intellectual traditions, and pressing concerns of the greater part of the world's population. This requires a critical reexamination of the persistence of Eurocentric postulates that were developed to support modern colonialism and nationalism with their variegated world of "otherness". As such, we adhere to the broadest and most inclusive definition of languages and cultures as we aim to understand, shape, and thrive in a global community characterized



by increased social connectivity, economic integration, intellectual exchange, and cultural hybridity.

## Programs

### Bachelor of Arts (BA)

- Africana Studies (p. 798)
- History, Culture, and Law (<http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/cultures-societies-global-studies/history-culture-law-ba/>)
- Spanish (p. 803)
- Spanish and International Affairs (p. 804)
- Religious Studies and Africana Studies (p. 801)
- Asian Studies (p. 767)
- History and Asian Studies (p. 768)

### Bachelor of Science (BS)

- Africana Studies (p. 808)
- American Sign Language (p. 810)
- American Sign Language and Human Services (p. 811)
- American Sign Language and Linguistics (p. 618)
- American Sign Language and Psychology (p. 735)
- American Sign Language and Theatre (p. 241)

## Minors

- African Studies (p. 817)
- Africana Studies (p. 817)
- American Sign Language (p. 817)
- Arabic (p. 818)
- Black Feminist Studies (p. 818)
- Chinese (p. 819)
- East Asian Studies (p. 769)
- Film and International Cultures (p. 819)
- French (p. 821)
- German (p. 820)
- Italian (p. 820)
- Japanese (p. 821)
- Portuguese (p. 822)
- Russian (p. 822)
- Spanish (p. 823)

## Africana Studies, BA

Africana studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social, economic, and historical experiences of the African Diaspora across the globe. Students are able to focus on either African American or African Studies.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Concentrations

Complete one of the following:

- No concentration option (p. 798)
- African American studies (p. 799)
- Africa studies (p. 799)

## Africana Studies Major Credit Requirements

Complete 48 semester hours in the major.

## Program Requirements

128 total semester hours required

### AFRICANA STUDIES (NO CONCENTRATION OPTION)

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		
AFAM 1101	Introduction to African-American Studies	
or AFRS 1101	Introduction to African Studies	
<b>Introductory Courses</b>		
Complete one of the following: 4		
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement: 8		
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2455	American Women Writers and Race	
AFAM 3663	The African American Novel	
AFRS 3410	Religion and Spirituality in the African Diaspora	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		
Complete two of the following, not already used for the introductory requirement: 8		

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFAM 2399	Black Community and Social Change
AFAM 2549	Public Policy and Black America
AFRS 2307	Africa Today
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3464	Natural Resources and Sustainable Development

**Electives (can include cross-listed courses)**  
 Complete three courses above 2000 level, not already taken  
 Complete three courses above 3000 level, not already taken

**Capstone**  
 AFAM 4700 Capstone  
 or AFRS 4700 Capstone  
 AFRS 4700 to be reactivated

**AFRICAN AMERICAN STUDIES CONCENTRATION**

Code	Title	Hours
<b>Foundational Course</b>		
AFAM 1101	Introduction to African-American Studies	
<b>Introductory Course</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFRS 1270	Introduction to Global Health	
<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2455	American Women Writers and Race	
AFAM 3663	The African American Novel	
AFRS 3410	Religion and Spirituality in the African Diaspora	
AFRS 3900	Gender and Black World Literatures	
<b>Social Sciences</b>		
Complete two of the following, not already used for the introductory requirement:		8
AFAM 1225	Gender, Race, and Medicine	
AFAM 2270	Race and Ethnic Relations	
AFAM 2339	Analysis of American Racism	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	

**Electives (may include cross-listed courses) 12**  
 Complete three courses above the 2000 level, not already taken  
 Complete three courses above the 3000 level, not already taken.

**Capstone**  
 AFAM 4700 Capstone

**AFRICA STUDIES CONCENTRATION**

Code	Title	Hours
<b>Foundational Course</b>		
AFRS 1101	Introduction to African Studies	
<b>Introductory Course</b>		
Complete one of the following:		4
AFAM 1113	Black Popular Culture	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	

<b>Humanities</b>		
Complete two of the following, not already used for the introductory requirement:		4
AFAM 1113	Black Popular Culture	
AFAM 2296	Early African-American Literature	
AFAM 3663	The African American Novel	
AFRS 3410	Religion and Spirituality in the African Diaspora	
AFRS 3900	Gender and Black World Literatures	

<b>Social Sciences</b>		
Complete two of the following, not already used for the introductory requirement:		8
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	
AFRS 2307	Africa Today	
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 3464	Natural Resources and Sustainable Development	

**Electives (may include cross-listed courses) 12**  
 Complete three courses above the 2000 level, not already taken.  
 Complete three courses above the 3000 level, not already taken.

**Capstone**  
 AFRS 4700 Capstone

**Plan of Study**  
**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CLTR 1000	1	AFAM 1113	4	Vacation	0	Vacation	0
AFAM 1101	4	AFAM 1225	4				
AFAM 1104	4	AFAM 2296	4				

MATH 1215	4	Elective	4			
ENGW 1111	4					
	17		16		0	0
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
AFAM intermediate/advanced undergraduate elective	4	AFAM intermediate/advanced undergraduate elective	4	Vacation	0	Co-op
Foreign language course	4	Foreign language course	4			
AFAM intermediate/advanced undergraduate elective	4	AFAM intermediate/advanced undergraduate elective	4			
Elective	4	Elective	4			
		EESH 2000	1			
	16		17		0	0
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	AFAM 3663	4	Elective	4	Co-op
		ENGW 3315	4	Upper-division elective	4	
		AFAM intermediate/advanced undergraduate elective	4			
		Foreign language course	4			
	0		16		8	0
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	Elective	4	Elective	4	Co-op
		Elective	4	Elective	4	
		AFAM intermediate/advanced undergraduate elective	4			
		Upper-division elective	4			
	0		16		8	0
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op	0	AFAM 4700	4			
		Elective	4			
		Elective	4			
		Elective	4			
	0		16			

Total Hours: 130

### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CLTR 1000	1	AFAM 2270	4	Vacation	0	Vacation
AFAM 1101	4	AFAM 1113	4			
AFAM 1109	4	AFAM 1135	4			
MATH 1215	4	AFAM 1225	4			
ENGW 1111	4					
	17		16		0	0
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
AFAM intermediate/advanced undergraduate elective	4	Co-op	0	Co-op	0	Elective
Foreign language course	4					Elective
AFAM intermediate/advanced undergraduate elective	4					
EESH 2000	1					
	17		0		0	8
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
AFAM intermediate/advanced undergraduate elective	4	Co-op	0	Co-op	0	Elective
Foreign language course	4					Elective
AFAM intermediate/advanced undergraduate elective	4					
Upper-division elective	4					
	16		0		0	8
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
AFAM 4700	4	Co-op	0	Co-op	0	Vacation
ENGW 3315	4					
AFAM intermediate/advanced undergraduate elective	4					
Foreign language course	4					
	16		0		0	0

Year 5			
Fall	Hours	Spring	Hours
Elective	4	Elective	4
Elective	4	Elective	4
AFAM intermediate/advanced undergraduate elective	4	Upper-division elective	4
Upper-division elective	4	Elective	4
		16	16

Total Hours: 130

### Religious Studies and Africana Studies, BA

The Department of Philosophy and Religion and the Program in Africana Studies offer an interdisciplinary combined major in religious studies and Africana studies. Students interested in the combined major integrate the study of religious traditions, religious praxis, and religious ethics with critical and systematic examination of the cultural, political, social, economic, and historical experiences of African Americans throughout the hemisphere and peoples of African descent around the world.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

#### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

#### Religious Studies Major Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement: 4		
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	

PHIL 1272	Contemporary Religious Ethics
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2322	Responses to the Holocaust
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4390	Cults and Sects
PHIL 4545	Religion and Politics in South Asia

#### Comparative Religion Elective

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

#### Electives

Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement: 20

PHIL 1111	Introduction to World Religions
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4390	Cults and Sects
PHIL 4395	Ramayana
PHIL 4545	Religion and Politics in South Asia

PHIL 4547	Seminar: Apocalypticism
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**Capstone**

Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

**Africana Studies Requirements**

Code	Title	Hours
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**Foundational**

AFAM 1101	Introduction to African-American Studies	4
or AFRS 1101	Introduction to African Studies	

**Introductory**

Complete one of the following: 4

AFAM 1101	Introduction to African-American Studies
AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health

**Humanities**

Complete two of the following: 8

AFAM 2296	Early African-American Literature
AFAM 2455	American Women Writers and Race
AFAM 3663	The African American Novel

**Social Sciences**

Complete two of the following: 8

AFRS 2307	Africa Today
AFAM 2399	Black Community and Social Change
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 3410	Religion and Spirituality in the African Diaspora
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3464	Natural Resources and Sustainable Development

**Electives**

Note: Electives may not double count for other AFAM or HIST combined-major requirements.

Complete one AFAM/AFRS course at the 2000 level or above	4
Complete one AFAM/AFRS course at the 3000 level or above	4

**Senior Capstone**

Choose one capstone course from the list below.	4
AFAM 4700	Capstone

PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

**Integrative Requirement**

Code	Title	Hours
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Complete the following course: 4

PHIL 3410	Religion and Spirituality in the African Diaspora
or AFRS 3410	Religion and Spirituality in the African Diaspora

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	Lived Religion Elective	4	Elective	4	Vacation	
PHIL 1110	4	Introductory Course	4	Elective	4		
Elective	4	Elective	4				
AFAM 1101 or AFRS 1101	4	Elective	4				
		16			16	8	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative Religion Elective	4	Co-op	4	Co-op	4	Elective	4
Social Sciences Course	4					Elective	4
PHIL 2000 Level Elective	4						
Elective	4						
		16			0	0	8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	AFAM/AFRS 3000 Level Elective	4	Elective	4	Elective	4
Humanities Course	4	PHIL 3000 Level Elective	4	Elective	4	Elective	4
Social Sciences Course	4	Elective	4				
AFAM/AFRS 2000 Level Elective	4	Elective	4				
		16			16	8	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours
Humanities Course	4	Co-op		Co-op	
Integrative Requirement Course	4				
PHIL Advanced Level Elective	4				
Capstone	4				
	16		0		0

Total Hours: 128

**Spanish, BA**

Spanish is the second most spoken language in the world. It is used in more than twenty countries, including the United States. In fact, in terms of the number of speakers, the United States is the second largest Spanish-speaking country in the planet. Being a Spanish speaker is a major professional and cultural asset as it prepares you to be successful in any career path. Yet, in our society, knowing Spanish is not just an asset; it is increasingly a necessity. Not only does proficiency in Spanish prepare you to be a leader in a country where Hispanics are the fastest growing segment of the population and where Spanish-speakers are the vast majority of the population in the hemisphere. Knowing Spanish also makes you a truly global citizen. Our Spanish BA certifies that you have attained advanced levels of listening, speaking, reading and writing proficiency in the language. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Spanish Major Requirements**

Code	Title	Hours
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	
SPNS 3102	Advanced Spanish 2	4
or SPNS 3302	Advanced Spanish Immersion 2	

**Language and Linguistics**

CLTR 1120	Introduction to Languages, Literature, and Culture	4
LING 1150	Introduction to Language and Linguistics	4

**Culture**

Complete four of the following: 16

LACS 1220	Latino, Latin American, and Caribbean Studies	
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3725	Representing Violence and Human Rights in Latin America	

**Literature**

Complete three of the following: 12

CLTR 3710	Representing Latin American Cities	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 4655	Latin American Literature	

**Spanish Seminar**

SPNS 4992	Directed Study	1-4
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**Study Abroad/Experiential Learning**

See department for details.

**Capstone**

LANG 4700	Capstone Seminar	4
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**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							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	CLTR 1120	4	Vacation	0	Vacation	0
MATH 1215	4	NUpath course or elective	4				
SPNS 2101	4	NUpath course or elective	4				
CLTR 1504	4	SPNS 2102	4				



CLTR 1000	1						
	17		16		0		0
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
SPNS 3101	4	CLTR 1505	4	Vacation	0	Co-op	0
CLTR 1240	4	NUpath course or elective	4				
LING 1150	4	CLTR 2715	4				
NUpath course or elective	4	SPNS 3102	4				
		EESH 2000	1				
	16		17		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	Study abroad	16	ENGW 3315	4	Co-op	0
				NUpath course or elective	4		
	0		16		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	CLTR 4655	4	NUpath course or elective	4	Co-op	0
		CLTR 4560	4	NUpath course or elective	4		
		NUpath course or elective	4				
		NUpath course or elective	4				
	0		16		8		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op	0	LANG 4700	4				
		CLTR 4561	4				
		NUpath course or elective	4				
		SPNS 4990	1-4				
		NUpath course or 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Spanish Language Requirements

Code	Title	Hours
<b>Spanish Language Requirements</b>		
SPNS 2101	Intermediate Spanish 1	4
SPNS 2102	Intermediate Spanish 2	4
SPNS 3101	Advanced Spanish 1	4
<b>Spanish Culture</b>		
Complete one of the following courses:		4
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	

### Spanish Literature

Complete one of the following courses:		4
CLTR 3710	Representing Latin American Cities	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 4655	Latin American Literature	

### Advanced Spanish Language

Complete two of the following courses in the appropriate language while on study abroad:		8
SPNS 2101 to SPNS 5999		
CLTR 3710	Representing Latin American Cities	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 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	
CLTR 3710	Representing Latin American Cities
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 3725	Representing Violence and Human Rights in Latin America
CLTR 4655	Latin American Literature

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ECON 1115 or ECON 1116	Principles of Macroeconomics Principles of Microeconomics	4
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		8
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	

or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
HIST 3330	The Global Cold War
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures

HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

**Development**

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Communication and Media**

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 adviser. See department for additional courses:

Code	Title	Hours
<b>Africa</b>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	

ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 3715	New Narratives: Latin America after 1989

CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**Integrative Courses**

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

**Spanish and International Affairs Combined-Major Credit/GPA Requirements**

Complete 84 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**  
**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	ECON 1115 or 1116	4				
INTL 1101	4	Elective	4				
CLTR 1120	4	SPNS 2102	4				
SPNS 2101	4						
		17	16	0	0		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL elective	4	INTL elective	4	Vacation	0	Co-op	0
Elective	4	Elective	4				
Elective	4	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	4	Upper division elective	4		
		Advanced literature/cultural course	4				
		Advanced literature/cultural course	4				
		0	16	8	0		

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Upper division elective	4	Co-op	0
		INTL 3400	4	INTL elective	4		
		Elective	4				
		Spanish elective 3000-5000	4				
		0	16	8	0		

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	INTL 4700	4
		Upper division elective	4
		Spanish elective 3000-5000	4

CLTR 4655	4
0	16

Total Hours: 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 or 1116	4				
INTL 1101	4	Elective	4				
CLTR 1120	4	SPNS 2202	4				
SPNS 2101	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	INTL elective	4
Spanish elective 3000-5000	4					Elective	4
SPNS 3101	4						
	12		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL elective	4	Co-op	0	Co-op	0	INTL elective	4
INTL elective	4					Upper division elective	4
Advanced literature/ cultural course	4						
Advanced literature/ cultural course	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op	0	Co-op	0	Vacation	0
ENGW 3315	4						
Elective	4						
Spanish elective 3000-5000	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
INTL elective	4	INTL elective	4
Upper division elective	4	INTL 4700	4
Elective	4	Upper division elective	4

Spanish elective 3000-5000	4	LITR 4655	4
	16		16

Total Hours: 125

**Africana Studies, BS**

Africana studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social, economic, and historical experiences of Africans, African-Americans throughout the hemisphere, and peoples of African descent around the world. Students are able to choose focused concentrations in African American or Africa Studies.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Concentrations**

Complete one of the following:

- No concentration option (p. 808)
- African American studies (p. 809)
- Africa studies (p. 809)

**Africana Studies Major Credit Requirements**

Complete 48 semester hours in the major.

**Program Requirements**

128 total semester hours required

**AFRICANA STUDIES (NO CONCENTRATION OPTION)**

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African-American Studies	
	or AFRS 1101	Introduction to African Studies
<b>Introductory Courses</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	

**Humanities Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 2455	American Women Writers and Race
AFAM 2296	Early African-American Literature
AFRS 3410	Religion and Spirituality in the African Diaspora
AFAM 3663	The African American Novel
AFRS 3900	Gender and Black World Literatures

**Social Science Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFAM 2270	Race and Ethnic Relations
AFAM 2339	Analysis of American Racism
AFAM 2399	Black Community and Social Change
AFAM 2549	Public Policy and Black America
AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 3464	Natural Resources and Sustainable Development
AFRS 4939	Community Health, Culture, and Development in Kenya

**Electives (6 courses)**

Complete three AFAM or AFRS courses above 2000 level, not already taken 24

Complete three AFAM or AFRS courses above 3000 level, not already taken 24

**Capstone**

AFAM 4700	Capstone	4
or AFRS 4700	Capstone	

**AFRICAN AMERICAN STUDIES CONCENTRATION**

Code	Title	Hours
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**Foundational Course**

AFAM 1101	Introduction to African-American Studies
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**Introductory Courses**

Complete one of the following: 4

AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture

AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 1225	Gender, Race, and Medicine

**Humanities Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1104	The African-American Experience through Music
AFAM 1113	Black Popular Culture
AFAM 1135	John Coltrane and the History of Jazz in the United States
AFAM 2455	American Women Writers and Race
AFAM 2296	Early African-American Literature
AFRS 3410	Religion and Spirituality in the African Diaspora
AFAM 3663	The African American Novel

**Social Science Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFAM 2270	Race and Ethnic Relations
AFAM 2339	Analysis of American Racism
AFAM 2399	Black Community and Social Change
AFAM 2549	Public Policy and Black America
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

**Electives (6 courses)**

Complete three AFAM courses above 2000 level, not already taken 24

Complete three AFAM courses above 3000 level, not already taken 24

**Capstone**

AFAM 4700	Capstone
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**AFRICA STUDIES CONCENTRATION**

Code	Title	Hours
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**Foundational Course**

AFRS 1101	Introduction to African Studies
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**Introductory Courses**

Complete one of the following: 4

AFAM 1113	Black Popular Culture
AFRS 1180	African History
AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health

**Humanities Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1113	Black Popular Culture
AFRS 1180	African History
AFAM 2296	Early African-American Literature
AFRS 3410	Religion and Spirituality in the African Diaspora



AFAM 3663	The African American Novel
AFRS 3900	Gender and Black World Literatures

**Social Science Courses**

Complete two of the following, not already used for the introductory requirement: 8

AFAM 1225	Gender, Race, and Medicine
AFRS 1270	Introduction to Global Health
AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 3464	Natural Resources and Sustainable Development
AFRS 4939	Community Health, Culture, and Development in Kenya

**Electives (6 courses)**

Complete three AFRS courses above 2000 level, not already taken	24
Complete three AFRS courses above 3000 level, not already taken	24

**Capstone**

AFRS 4700	Capstone
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**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CLTR 1000	1	AFAM 1135	4	Vacation	0	Vacation	0
AFRS 1101	4	AFAM 2270	4				
AFAM 1225	4	AFAM 2296	4				
MATH 1215	4	Elective	4				
ENGW 1111	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AFRS 1180	4	AFRS 2465	4	Vacation	0	Co-op	0
AFRS 1270	4	AFRS 3410	4				
AFRS 2307	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 3315	4	Elective	4	Co-op	0
		Elective	4	Elective	4		
		AFRS 3900	4				

AFRS 3460	4				
	0	16	8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	AFRS 3424	4	Elective	4	Co-op	0
		Upper-division elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	AFRS 4700	4
		Upper-division elective	4
		Upper-division elective	4
		Elective	4
	0		16

Total Hours: 130

**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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## American Sign Language Major Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
AMSL 3102	Advanced ASL 2	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Performance Interpreting</b>		
INTP 3550	Performance Interpreting—Interpreting for the Theatre	4
<b>Intpreting</b>		
INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4
INTP 3515	Interpreting Narrative Texts	4
INTP 4510	Interpreting Expository Texts	4
INTP 4515	Interpreting Persuasive Texts	4
<b>Interpreting Practicum</b>		
INTP 4995	Interpreting Practicum	4
<b>Ethics</b>		
INTP 4650	Ethical Decision Making	4
INTP 4651	Ethical Fieldwork	2
<b>Research Capstone</b>		
INTP 4940	Interpreting Research Capstone	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	0
AMSL 1101	4	MATH 1215	4				
ENGW 1111	4	Elective	4				
INTP 1000	1	Elective	4				

Elective	4						
	17		16		0		0
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
DEAF 2500	4	AMSL 2102	4	Vacation	0	Vacation	0
AMSL 2101	4	DEAF 2700	4				
LING 1150	4	Elective	4				
Elective	4	Elective	4				
	16		16		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
INTP 3500	2	INTP 3515	4	Vacation	0	Vacation	0
INTP 3510	4	INTP 3550	4				
ENGW 3315	4	AMSL 3102	4				
AMSL 3101	4	Elective	4				
	14		16		0		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
AMSL 3102	Advanced ASL 2	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Performance Interpreting</b>		
INTP 3500	The Interpreting Profession	2
<b>Interpreting</b>		
INTP 3510	Interpreting Inquiry Texts	4

## Human Services Requirements

Code	Title	Hours
<b>Human Services</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4700	Senior Seminar in Human Services	4
<b>Organizations</b>		
SOCL 3440	Sociology of Human Service Organizations	4
<b>Human Services Elective</b>		
Complete one course in HUSV subject area.		4

## Integrative Requirement

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
HUSV 4994	Human Services Internship	6

## Combined-Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

## Combined-Major Credit Requirement

Complete 88 semester hours in the major.

## Program Requirements

128 total semester hours required

## Plan of Study

### Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 1101	4	AMSL 1102	4	Vacation	0	Vacation	0
DEAF 1500	4	MATH 1215	4				
HUSV 1101	4	HSVC elective	4				
ENGW 1111	4	Elective	4				
		16			16	0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
LING 1150	4	DEAF 2700	4				
Elective	4	HUSV 2300	4				
INTP 3500	2	Elective	4				
		14			16	0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DEAF 2500	4	HUSV 2970	4	Vacation	0	Vacation	0
SOCL 3440	4	Elective	4				
INTP 3510	4	ENGW 3315	4				
AMSL 3101	4	AMSL 3102	4				
		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				
		18			12		

Total Hours: 124

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### American Sign Language Requirements

Code	Title	Hours
<b>Language Requirement</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Interpreting</b>		
INTP 3500	The Interpreting Profession	2
INTP 3510	Interpreting Inquiry Texts	4

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Foundations</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Psychology of Language</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3464	Psychology of Language	4
<b>Linguistics Electives</b>		
Complete two courses (not counted elsewhere) from the following:		8
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3442	Sociolinguistics	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	

LING 3456	Language and Gender
LING 3458	Topics in Linguistics
LING 3460	Historical Linguistics
LING 4654	Seminar in Linguistics
LING 4891	Research Seminar in Linguistics
or LING 4970	Junior/Senior Honors Project 1
or LING 4971	Junior/Senior Honors Project 2
or LING 4991	Directed Study Research
or PSYC 4991	Directed Study Research
LING 4993	Independent Study
PSYC 4520	Language and the Brain
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4658	Seminar in Psycholinguistics

<b>Seminar Requirement</b>	
Complete one course (not counted elsewhere) from the following:	4
LING 4654	Seminar in Linguistics
LING 4891	Research Seminar in Linguistics
PSYC 4658	Seminar in Psycholinguistics

### Integrative Courses

Code	Title	Hours
DEAF 2700	ASL Linguistics	4
INTP 4940	Interpreting Research Capstone	4
LING 3412	Language and Culture	4

### Combined-Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

### Combined-Major Credit Requirement

Complete 90 semester hours in the major.

### Program Requirements

128 total semester hours required

### Plan of Study

#### Sample, Four Years

Year 1			
Fall	Hours	Spring	Hours
AMSL 1101	4	AMSL 1102	4
DEAF 1500	4	LING 2350	4
LING 1150	4	LING 3412	4
NUpath/Elective	4	NUpath/Elective	4
		16	16

Year 2			
Fall	Hours	Spring	Hours
AMSL 2101	4	AMSL 2102	4
DEAF 2500	4	DEAF 2700	4
PSYC 1101	4	PSYC 2320	4
NUpath/Elective	4	NUpath/Elective	4
		16	16

**Year 3**

Fall	Hours	Spring	Hours
AMSL 3101	4	Linguistic Structure course	4
INTP 3500	2	Linguistic Structure course or Linguistics Elective	4
INTP 3510	4	PSYC 3464	4
Linguistic Structure course	4	NUpath/Elective	4
NUpath/Elective	4		
		18	16

**Year 4**

Fall	Hours	Spring	Hours
INTP 4940	4	Linguistics Seminar	4
Linguistics Elective or Linguistic Structure course	4	Linguistics Elective	4
NUpath/Elective	4	NUpath/Elective	4
NUpath/Elective	4	NUpath/Elective	4
		16	16

Total Hours: 130

## American Sign Language and Psychology, BS

This combined major educates students in cognitive psychology, psycholinguistics, and the structures of human languages in general and American Sign Language (ASL) in particular. Students have an opportunity to simultaneously gain proficiency in speaking and interpreting ASL, giving them access to the culture of Deaf Americans; insights into various features of spoken language; and firsthand experience of the principles underlying the spatial organization of discourse required by signed languages. This knowledge and the psychology background from the major provide a foundation for more advanced studies of ASL and interpreting.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Performance Interpreting</b>		
INTP 3500	The Interpreting Profession	2
<b>Interpreting</b>		
INTP 3510	Interpreting Inquiry Texts	4

## Psychology Requirements

Code	Title	Hours
<b>Psychology</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3466	Cognition	4
<b>Psychology Lab or Directed Study</b>		
Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	
PSYC 4991	Directed Study Research	
<b>Personal/Social Bases of Behavior (Area A)</b>		
Complete two of the following:		8
PSYC 3400	Personality	
PSYC 3402	Social Psychology	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
<b>Biological/Cognitive Bases of Behavior (Area B)</b>		
Complete one of the following:		4
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3458	Biological Psychology	

Language/Cognition Elective	
Complete one of the following:	4
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

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.

### Integrative Requirements

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
PSYC 3464	Psychology of Language	4

### Combined-Major GPA Requirement

Minimum 2.750 GPA required in all 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	LING 1150	4				
PSYC 1101	4	MATH 1215	4				
ENGW 1111	4	Elective	4				
16		16		0		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
DEAF 2500	4	PSYC 2320	4				
PSYC 3464	4	PSYC 3466	4				
Elective	4	Elective	4				
16		16		0		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 3101	4	DEAF 2700	4	Vacation	0	Vacation	0
Psych Area A elective	4	Psych Area B elective	4				
ENGW 3315	4	Language/cognition elective	4				
INTP 3510	4	AMSL 3102	4				
16		16		0		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTP 4940	4	Psych lab elective	4				
Elective	4	Psych Area A elective	4				

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### 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

DEAF 2700	ASL Linguistics	4
LING 1150	Introduction to Language and Linguistics	4



**Performance Interpreting**

INTP 3550	Performance Interpreting—Interpreting for the Theatre	4
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**Interpreting**

INTP 3500	The Interpreting Profession	2
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**Theatre Requirements**

Code	Title	Hours
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**Theatre**

A grade of C or higher is required for all theatre courses.

**Foundational Stages**

THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

**Theatre Texts and Context**

Choose one of the following: 4

THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

**Making Theatre**

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1

**Intermediate or Advanced Technique**

Choose two of the following: 8

THTR 2300	Classics of Global Theatre	
THTR 2310	History of Musical Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2330	Playwriting	
THTR 2340	Theatre and Society	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 2600	Voice and Speech for the Actor	
THTR 3100	Creative Storytelling for Social Engagement	
THTR 3200	Queer Theatre and Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	

**Integrative Requirement**

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
THTR 4702	Capstone Rehearsal and Performance	4

**Combined-Major GPA Requirement**

Minimum 2.750 GPA required in all ASL courses  
Minimum 2.500 overall GPA required

**Combined-Major Credit/Grade Requirement**

Complete 88 semester hours in the major. A minimum grade of C is required for all theatre courses.

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, One Co-op****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 1101	4	AMSL 1102	4	Elective	4	Vacation	0
DEAF 1500	4	THTR 1120	4	Elective	4		
THTR 1100	1	THTR Text & Context 1	4				
THTR 1101	4	Elective	4				
ENGW 1111	4						
	17		16		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
LING 1150	4	DEAF 2700	4				
DEAF 2500	4	THTR 1131	4				
THTR 1270	4	THTR Intermediate or Advanced 1	4				
THTR 2000	1						
	17		16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTP 3550 or 3510	4	Co-op #1		Co-op #1	0	Elective	4
THTR 2325	4					Elective	4
INTP 3500	2						
Elective	4						
Elective	4						
EEAM 2000	1						
	19		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
ENGW 3315	4	THTR 4702	4
THTR Intermediate or Advanced 2	4	INTP 4940	4
Elective	4	AMSL 3101	4
Elective	4	Elective	4
	16		16

Total Hours: 133

## African Studies, Minor

The mission of the African and African-American Studies Program is to mentor intellectual leaders, to develop emerging scholars, and to train global citizens who are able to explore the world from diverse perspectives in an ever increasingly global and interdisciplinary world. In our experiential liberal arts education model, students study culture, history, politics, and society as they relate to African and African-American studies to cultivate their thinking, reading, and writing skills through interdisciplinary class-based and experiential learning opportunities. Some of the major areas of interest and research of our faculty include the public humanities and public policy, critical race theory and empire/colonialism, criminal justice and carceral state, global public health and neglected tropical diseases, gender, sexuality, and women's studies.

Through rigorous study, co-op, study abroad, Dialogue of Civilizations, and service-learning, students have an opportunity to acquire use-inspired knowledge and competencies that will equip them with endless possibilities to flexibly fit any profession and graduate studies they may pursue in the social sciences and humanities.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Course

Code	Title	Hours
AFRS 1101	Introduction to African Studies (A grade of C or higher is required)	4

### Social Sciences

Code	Title	Hours
Complete two of the following:		8
AFRS 1185		
AFRS 2307	Africa Today	
AFRS 2414		
AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
INTL 3565	Morocco: History, Cultures, and Economic Development in the Mediterranean Basin	
POLS 3487	Politics of Developing Nations	

### Humanities

Code	Title	Hours
AFAM 1109		4
AFRS 1180	African History	4

### GPA Requirement

2.000 GPA required in the minor

## Africana Studies, Minor

Africana studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social, economic, and historical experiences of African-descended people from across the globe. Students also have the option to focus on African or African-American 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
<b>Foundational</b>		
AFAM 1101	Introduction to African-American Studies	4
<b>Humanities</b>		
Complete one of the following:		4
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 2296	Early African-American Literature	
AFAM 2455	American Women Writers and Race	
<b>Social Sciences</b>		
Complete one of the following:		4
AFAM 1225	Gender, Race, and Medicine	
AFAM 2270	Race and Ethnic Relations	
AFAM 2399	Black Community and Social Change	
AFAM 2549	Public Policy and Black America	
AFRS 3410	Religion and Spirituality in the African Diaspora	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	

### Electives

Code	Title	Hours
Complete one AFAM or AFRS course at the 2000 level or above, not already taken.		
Complete one AFAM or AFRS course at the 3000 level or above, not already taken.		
		8

### 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 decision-making skills as well as the sociocultural knowledge necessary to work in positive and supportive ways with Deaf people.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
DEAF 1500	Deaf People in Society	4

### Required Language Courses

Code	Title	Hours
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4

### Elective

Code	Title	Hours
Complete one of the following:		
AMSL 3101	Advanced ASL 1	4
AMSL 3102	Advanced ASL 2	4
AMSL 4992	Directed Study	4
DEAF 2500	Deaf History and Culture	4
DEAF 2700	ASL Linguistics	4

### GPA Requirement

2.000 GPA required in the minor

## Arabic, Minor

We live in a truly global world, where the leaders of tomorrow will dwell in, and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Arabic, the fifth largest language in the world in terms of speakers, will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

### Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

### Required Language Courses

Students may waive any of these courses by taking the language exam in the World Languages Center.

Code	Title	Hours
ARAB 2101 or ARAB 2301	Intermediate Arabic 1 Intermediate Arabic Immersion 1	4
ARAB 2102 or ARAB 2302	Intermediate Arabic 2 Intermediate Arabic Immersion 2	4

### Electives

Code	Title	Hours
ARAB 3301	Advanced Arabic Immersion 1	4
ARAB 3302	Advanced Arabic Immersion 2	4
ARAB 4992	Directed Study	4
CLTR 1151	Muslim Writers and the Qur'an (in English Translations)	4
CLTR 1502	Introduction to Arabic Culture	4
CLTR 4944	Cultural Engagement Abroad	4
HIST 1185	Introduction to Middle Eastern History	4
HIST 1290	Modern Middle East	4
INTL 1160	Middle East Studies	4
INTL 2400	Politics of Islam and Gender	4
POLS 3465	Government and Politics in the Middle East	4
POLS 4915	Model Arab League	4

### GPA Requirement

2.000 GPA required in the minor

## Black Feminist Studies, Minor

This interdisciplinary minor offers students opportunities to critically engage with the histories and theories that sit at the intersections of race, gender, class, and sexuality. This minor will allow students to centralize the study of Black women from diverse disciplinary perspectives and provide students with opportunities to engage comparative and transnational Black feminist studies frameworks for analyzing gender, sexuality, and other concepts within the broader disciplines of Africana and women's, gender, and sexuality studies.

## Minor Requirements

Code	Title	Hours
<b>Required Courses</b>		
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	4
AFAM 1101	Introduction to African-American Studies	4
or AFRS 1101	Introduction to African Studies	

### Electives

Complete two of the following:

AFAM 1113	Black Popular Culture	4
AFRS 3900	Gender and Black World Literatures	4
ENGL 2451	Postcolonial Women Writers	4
ENGL 2455	American Women Writers Race	4
SOCL 4520	Race, Class, and Gender	4
WMNS 1225	Gender, Race, and Medicine	4
WMNS 2505	Digital Feminisms	4
WMNS 3100	Gender, Social Justice, and Transnational Activism	4

## Chinese, Minor

The leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed exclusively by a single people, language, or culture. Knowing Chinese will help students become truly global citizens. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens a door for a fascinating cultural and intellectual world in and beyond the classroom, with a myriad of opportunities to travel, live, and work abroad.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students are required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogue of Civilizations at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count toward the five classes in the minor.

## Required Culture Course

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

## Required Language Courses

Students may waive any of these courses by taking the language exam in the World Languages Center.

Code	Title	Hours
CHNS 2101	Intermediate Chinese 1	4
or CHNS 2301	Intermediate Chinese Immersion 1	
CHNS 2102	Intermediate Chinese 2	4
or CHNS 2302	Intermediate Chinese Immersion 2	

## Electives

Code	Title	Hours
ASNS 3422	Topics in Chinese Studies	
CHNS 3101	Advanced Chinese 1	
or CHNS 3301	Advanced Chinese Immersion 1	
CHNS 3102	Advanced Chinese 2	
or CHNS 3302	Advanced Chinese Immersion 2	
CHNS 3800	Special Topics in Chinese	
CHNS 4800	Special Topics in Chinese	
CHNS 4992	Directed Study	
CLTR 1500	Modern Chinese History and Culture	
or HIST 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 4944	Cultural Engagement Abroad	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2360	History of Capitalism in East Asia	

## GPA Requirement

2.000 GPA required in the minor

## Film and International Cultures, Minor

The minor in Film and International Cultures allows students to study the rapidly expanding global visual culture. Students will explore the history, theory, aesthetics and criticism of film and other moving-image media on a global scale and in relation to culture, other arts, politics and propaganda. The minor also explores how the image and the film/propaganda industry shape the world we live in and the ways in which we conceive of ourselves and others.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* At least two of the courses taken for the minor must be at or above the 2000 level.

## Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
CLTR 2001	World Cultures through Film	4

## Film and Culture Study

Code	Title	Hours
Select one of the following pairings:		
CLTR 1240 and CLTR 1505	Latin American Film and Latin American Culture, History, and Politics	8
CLTR 1260 and CLTR 1700	Japanese Film and Introduction to Japanese Pop Culture	
CLTR 2715 and LACS 1220	New Media Narratives in Latin America: Local and Global Dimensions and Latino, Latin American, and Caribbean Studies	

## Elective

*Note:* Courses taken for this requirement cannot be double-counted with courses taken to fulfill the film and culture study requirement.

Code	Title	Hours
Complete one of the following:		4
CLTR 1151	Muslim Writers and the Qur'an (in English Translations)	
CLTR 1240	Latin American Film	
CLTR 1260	Japanese Film	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1501	Introduction to French Culture	
CLTR 1502	Introduction to Arabic Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3500	French Culture and the Arts	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 4655	Latin American Literature	

## GPA Requirement

2.000 GPA required in the minor

### German, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language, or culture. Knowing German will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. The minor also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live, and work abroad.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students are required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count toward the five classes in the minor.

## Culture Course Requirement

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

## Language Requirement

Students may waive any of these courses by taking the language exam in the World Languages Center.

Code	Title	Hours
GRMN 2101	Intermediate German 1	4
GRMN 2102	Intermediate German 2	4

## Electives

Code	Title	Hours
Complete two of the following:		
GRMN 3800	Special Topics in German	
GRMN 4800	Special Topics in German	
CLTR 4944	Cultural Engagement Abroad	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
LING 1150	Introduction to Language and Linguistics	
LING 3412	Language and Culture	
PHIL 2322	Responses to the Holocaust	
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PSYC 3464	Psychology of Language	

## GPA Requirement

2.000 GPA required in the minor

### Italian, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Italian will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

## Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

## Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

Code	Title	Hours
ITLN 2101 or ITLN 2301	Intermediate Italian 1 Intermediate Italian Immersion 1	4
ITLN 2102 or ITLN 2302	Intermediate Italian 2 Intermediate Italian Immersion 2	4

## Electives

Code	Title	Hours
CLTR 1503	Introduction to Italian Culture	
CLTR 4944	Cultural Engagement Abroad	
ITLN 3101 or ITLN 3301	Advanced Italian 1 Advanced Italian Immersion 1	
ITLN 4992	Directed Study	

## GPA Requirement

2.000 GPA required in the minor

### Japanese, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Japanese will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count toward the five courses in the minor.

## Required Courses

Code	Title	Hours
CLTR 1120 or JPNS 3101 or JPNS 3102	Introduction to Languages, Literature, and Culture Advanced Japanese 1 Advanced Japanese 2	4

## 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 or JPNS 2301	Intermediate Japanese 1 Intermediate Japanese Immersion 1	4
JPNS 2102 or JPNS 2302	Intermediate Japanese 2 Intermediate Japanese Immersion 2	4

## Electives

Code	Title	Hours
ASNS 1150	East Asian Studies	
CLTR 1260	Japanese Film	
CLTR 1700	Introduction to Japanese Pop Culture	
CLTR 4944	Cultural Engagement Abroad	
HIST 1252	Japanese Literature and Culture	
HIST 2351	Modern Japan	
JPNS 3101 or JPNS 3301	Advanced Japanese 1 Advanced Japanese Immersion 1	
JPNS 3102	Advanced Japanese 2	
JPNS 4992	Directed Study	

## GPA Requirement

2.000 GPA required in the minor

### French, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing French will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

## Required Culture Course

This course must be taken on campus. It may not be substituted by courses taken on Dialogue programs, through study abroad or at another institution.

Code	Title	Hours
CLTR 1120 or FRNH 3101 or FRNH 3102	Introduction to Languages, Literature, and Culture Advanced French 1 Advanced French 2	4

## Required Language Courses

Students may waive one or both of the courses below by taking the language exam in the World Language Center. Waived courses must be replaced by electives. Please see the elective list for options.

Code	Title	Hours
FRNH 2101 or FRNH 2301	Intermediate French 1 Intermediate French Immersion 1	4
FRNH 2102 or FRNH 2302	Intermediate French 2 Intermediate French Immersion 2	4



## Electives

If any courses were waived in previous requirements, please complete additional electives to reach five total courses for the French minor.

Code	Title	Hours
Take two courses from the following list:		
CLTR 1501	Introduction to French Culture	
CLTR 4944	Cultural Engagement Abroad	
FRNH 2900	Specialized Instruction in French	
FRNH 3101	Advanced French 1	
or FRNH 3301	Advanced French Immersion 1	
FRNH 3102	Advanced French 2	
or FRNH 3302	Advanced French Immersion 2	
FRNH 3900	Specialized Instruction in French	
FRNH 4201	Advanced Proficiency French 1—BSIB	
FRNH 4202	Advanced Proficiency French 2—BSIB	
FRNH 4800	Special Topics in French	

## GPA Requirement

2.000 GPA required in the minor

## Portuguese, Minor

We live in a truly global world where the leaders of tomorrow will dwell in and negotiate all transactions in spaces not claimed in exclusivity by a single people, language or culture. Knowing Portuguese will help you become a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

## Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

## Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

Code	Title	Hours
PORT 2101	Intermediate Portuguese 1	4
PORT 2102	Intermediate Portuguese 2	4

## Electives

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 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. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

## Required Culture Courses

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4

## Required Language Courses

Students may waive any of these courses by taking the language exam in the World Language Center.

Code	Title	Hours
RSSN 2101	Intermediate Russian 1	4
or RSSN 2301	Intermediate Russian Immersion 1	
RSSN 2102	Intermediate Russian 2	4
or RSSN 2302	Intermediate Russian Immersion 2	

## Electives

Code	Title	Hours
CLTR 4944	Cultural Engagement Abroad	
HIST 1285	Introduction to Russian Civilization	
HIST 1286	History of the Soviet Union	
RSSN 4992	Directed Study	
RSSN 4993	Independent Study	
SOCL 1215	Understanding Russia	

## GPA Requirement

2.000 GPA required in the minor

## Spanish, Minor

Spanish is the second most spoken language in the world. It is used in more than twenty countries, including the United States. In fact, in terms of the number of speakers, the United States is the second largest Spanish-speaking country in the planet. Being a Spanish speaker is a major professional and cultural asset as it prepares you to be successful in any career path. Yet, in our society, knowing Spanish is not just an asset; it is increasingly a necessity. Not only does proficiency in Spanish prepare you to be a leader in a country where Hispanics are the fastest growing segment of the population and where Spanish-speakers are the vast majority of the population in the hemisphere. Knowing Spanish also makes you a truly global citizen. Successful completion of the minor demonstrates the attainment of intermediate to advanced proficiency in the language, as well as cultural understanding and agility. It also opens before you a fascinating cultural and intellectual world in and beyond the classroom with a myriad of opportunities to travel, live and work abroad.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

Students will be required to take a total of five classes. These classes may include courses and language classes at or above the intermediate level in Dialogues of Civilization at NU. A maximum of two courses of transfer credits, including transferable courses taken abroad, may count towards the five classes in the minor.

### Required Culture Course

This course must be taken on campus. It may not be replaced by courses taken on Dialogue programs, through study abroad or at another institution.

Code	Title	Hours
CLTR 1120	Introduction to Languages, Literature, and Culture	4
or SPNS 3101	Advanced Spanish 1	
or SPNS 3102	Advanced Spanish 2	

### Required Language Courses

Students may waive one or both of the courses below by taking the language exam in the World Language Center. Waived courses must be replaced by electives. Please see the elective list for options.

Code	Title	Hours
SPNS 2101	Intermediate Spanish 1	4
or SPNS 2301	Intermediate Spanish Immersion 1	
or SPNS 2401	Intermediate Spanish 1 for Healthcare Professionals	
SPNS 2102	Intermediate Spanish 2	4
or SPNS 2302	Intermediate Spanish Immersion 2	
or SPNS 2402	Intermediate Spanish 2 for Healthcare Professionals	

### Electives

Take at least two of the following. If one or both of the intermediate level courses were waived, please complete additional electives to reach five total courses for the Spanish minor.

Code	Title	Hours
ANTH 4500	Latin American Society and Development	
or INTL 4500	Latin American Society and Development	
CLTR 1240	Latin American Film	
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 2715	New Media Narratives in Latin America: Local and Global Dimensions	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 3805	Culture, Politics, and Media in Spain	
CLTR 4655	Latin American Literature	
CLTR 4944	Cultural Engagement Abroad	
HIST 1187	Introduction to Latin American History	
LACS 1220	Latino, Latin American, and Caribbean Studies	
SPNS 2900	Specialized Instruction in Spanish	
SPNS 3101	Advanced Spanish 1	
or SPNS 3301	Advanced Spanish Immersion 1	
SPNS 3102	Advanced Spanish 2	
or SPNS 3302	Advanced Spanish Immersion 2	
SPNS 3501	Advanced Spanish Conversation: Global Communication	
SPNS 3601	Exploring Spoken Spanish	
SPNS 3800	Special Topics in Spanish	
SPNS 3900	Specialized Instruction in Spanish	
SPNS 4800	Special Topics in Spanish	

### GPA Requirement

2.000 GPA required in the minor

## Economics

Website (<http://www.northeastern.edu/cssh/economics/>)

### Robert Triest, PhD

Professor and Chair

301 Lake Hall  
617.373.2882  
617.373.3640 (fax)  
econ@northeastern.edu

Economics is the study of how societies produce and exchange goods and services to satisfy needs. Undergraduates may study economics to develop specialized analytical skills useful in today's complex labor market. Economics is distinguished among the social sciences by having a systematic normative as well as a positive framework for evaluating public policy. The major in economics is also a good foundation for graduate studies in advanced economics, public policy, law, or business.

Macroeconomics, which focuses on the overall economy, deals with such problems as inflation, unemployment, growth and instability, economic development, and governmental monetary and fiscal policies.

Microeconomics examines the economic behavior of individuals, households, firms, industries, and trade among countries. It seeks to assess the economic effects of market power and environmental damage and analyzes the economic aspects of natural resources, poverty, health, income distribution, trade unions, crime, and government regulation.

Courses in economics cover international trade; the behavior of families, firms, and industries in the market economy; the environmental costs of growth; and the economic aspects of natural resources, poverty, health, labor market discrimination, trade unions, crime, and governmental oversight. International and comparative perspectives are emphasized, most directly in courses in studies of the developing world and economic history.

Students may pursue a BA, a BS, or a minor in economics. Additionally, economics majors in their junior year may qualify for admission to the PlusOne program that combines the BA or BS with a MS in economics (requires an additional 16 semester hours of coursework). The department also offers combined majors with business administration, computer science, cybersecurity, data science, environmental studies, history, international affairs, mathematics, philosophy, political science, and psychology, as well as an interdisciplinary major in politics, philosophy, and economics.

Graduates may find jobs in major corporations; financial institutions; nonprofits; NGOs; or federal, state, and local governments. Their work may involve planning and forecasting, assessing labor needs, and undertaking financial studies. They may estimate consumer demand for new products, conduct research, teach, or provide specialized consulting services.

## Academic Progression Standards

The following are the requirements to progress in the major:

Code	Title	Hours
The following three core courses should be completed first:		12
ECON 1115	Principles of Macroeconomics	
ECON 1116	Principles of Microeconomics	
MATH 1231	Calculus for Business and Economics	
The following four core courses should be completed by the end of sophomore year:		16
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
ECON 2560	Applied Econometrics	

## PlusOne Program (MS) in Economics

The PlusOne program in economics offers an opportunity for the best of Northeastern's undergraduate economics majors to complete both the undergraduate degree program (BS or BA) and a master's program (MS) 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 coursework 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. 824)
- History and Economics (p. 826)
- International Affairs and Economics (p. 827)
- Political Science and Economics (p. 831)

### Bachelor of Science (BS)

- Economics (p. 833)
- Computer Science and Economics (p. 341)
- Cybersecurity and Economics (p. 382)
- Data Science and Economics (p. 396)
- Economics and Business Administration (p. 279)
- Economics and Mathematics (p. 690)
- Economics and Philosophy (p. 841)
- Economics and Psychology (p. 744)
- Environmental Studies and Economics (p. 677)
- History and Economics (p. 846)
- Political Science and Economics (p. 847)
- Politics, Philosophy, and Economics (p. 757)

### Minor

- Economics (p. 853)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Economics, BA

The Bachelor of Arts degree in economics maintains the tradition of the liberal arts with the language and arts courses required to satisfy the university's BA degree requirements. Along with the six core courses in economics, students may choose from over 40 electives. Many of these electives continue this liberal arts tradition with courses that focus on economic literature, economic history, the history of economic thought, and political economy. Students considering future doctoral studies in economics are strongly encouraged to pursue a double major in economics (BS) and mathematics (BS) or choose our combined economics/mathematics major.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Economics Major Requirements for BA

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Senior Seminar</b>		
ECON 4692	Senior Economics Seminar	4

### Economics Electives for BA

Code	Title	Hours
Complete 5 courses that are found in the following ranges, with no more than one in the ECON 1200 to ECON 1999 range: 20		
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Breadth Courses for Economics Major

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
<b>Computer Science</b>		
Complete one of the following: 4		
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	

### 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 abroad or co-op: 4		
ECON 4970	Junior/Senior Honors Project 1	
ECON 4971	Junior/Senior Honors Project 2	
ECON 4992	Directed Study	
ECON 4996	Experiential Education Directed Study	

### Economics Major GPA/Credit Requirement

Grades in the following four courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4

ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 56 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1000	1	CS 1100 or MISM 2510 (or DS 2000 with DS 2001)	4	Elective	4	Elective	4
ECON 1115	4	ECON 1116	4	ECON elective 1	4	Elective	4
ENGW 1111	4	Foreign language core course	4				
MATH 1231	4	Elective	4				
Foreign language core course	4						
		17		16		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2350	4	ECON 2316	4	Elective	4	Co-op	0
ECON 2315	4	ECON elective 2	4	Elective	4		
Foreign language core course	4	Elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
		16		17		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3308	4	ECON elective 4	4	Co-op	0
		ECON elective 3	4	Elective	4		
		ECON 2560	4				
		Elective	4				
		0		16		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ECON elective 5	4				
		Elective	4				
		ECON 4692	4				
		Elective	4				
		0		16			

Total Hours: 130

## History and Economics, BA

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level (except from HIST 1200 and HIST 1201).		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 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 1185	Introduction to Middle Eastern History	
HIST 2370	Renaissance to Enlightenment	
HIST 1270	Ancient Greece	
HIST 1271	Ancient Rome	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
<b>Intermediate/Advanced History Courses</b>		
Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.		16

### Advanced History

Complete one history course at the 3000 level or above. 4

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or HIST 1000	Economics at Northeastern History at Northeastern	1
<b>Required Economics Courses</b>		
ECON 1115	<i>Principles of Macroeconomics</i>	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3520	History of Economic Thought	4
<b>Economics Electives</b>		
Complete two economics elective courses that are found in the following ranges, with no more than one in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement and ECON 3520 may not be used as economics electives:		8
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
<b>Supplemental Courses</b>		
CS 1100	Computer Science and Its Applications	4
MATH 1231	Calculus for Business and Economics	4

### Capstone Requirements

Code	Title	Hours
Complete one of the following options (Public History concentrations complete HIST 4903 and HIST 4904):		4
ECON 4692	Senior Economics Seminar	
HIST 4701	Capstone Seminar	

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		4
ECON 3470	American Economic History	
ECON 1293	European Economic History	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

### History and Economics Major GPA/Credit Requirement

Grades in the following four economics courses must average a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 92 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	ECON 1116	4	ECON 2315	4	Elective	4
ECON 1000 or HIST 1000	1	ECON elective 1	4	HIST elective 3	4	Elective	4
HIST 1200	1	HIST elective 1	4				
HIST 1201	4	HIST elective 2	4				
Elective	4						
Foreign language or elective	4						
	18		16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	ECON 2350	4	Elective	4	Co-op	
HIST 2301	4	HIST elective 4	4	Elective	4		
HIST 2302	1	HIST elective 5	4				
Elective	4	EESH 2000	1				
Elective	4	Foreign language or elective	4				
	17		17		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 2560	4	HIST elective 7	4	Co-op	
		HIST elective 6	4	ECON elective 2	4		
		ENGW 3315	4				
		ECON 3520	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 4692 or HIST 4701	4				
		ECON 3470, HIST 2360, HIST 2011, or ECON 1293	4				
		Elective	4				
		Elective	4				
	0		16				

Total Hours: 132

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>International Affairs/Economics at Northeastern</b>		
INTL 1000 or ECON 1000	International Affairs at Northeastern Economics at Northeastern	1
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ANTH 1101	Peoples and Cultures	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	

### Global Dynamics



Complete two of the following with one course numbered 2000 or above. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:

*Environment*

ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
SOCL 1246	Environment and Society

*Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication
INTL 2480 or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2400	Politics of Islam and Gender
INTL 2480 or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

*Globalization*

ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity

ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480 or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
ECON 3404	International Food Policy
HIST 2011	Capitalism and Business: A Global History
INTB 1203 or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business

JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International Experiential Learning**

Complete at least one “international semester” via study abroad, international internship, international co-op, or two short-term programs.

**Regional Analysis Requirement**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
	Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty advisor. See department for additional courses:	12

**Africa**

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
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
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
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	Islam: Rituals, Traditions, and Debates

PHIL 1285	Jewish Religion and Culture
<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding 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.

### Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 3520	History of Economic Thought	4

### Economics Electives

Code	Title	Hours
Complete 3 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy international affairs requirements, courses used to satisfy the integrative courses requirement, and ECON 3520 may not be used as Economics electives.		
ECON 1200 to ECON 1999		12
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Supporting Courses

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
<b>Methods</b>		
CS 1100	Computer Science and Its Applications	4
or INTL 2718	Research Methods in International Affairs	
or MISM 2510	Fundamentals of Information Analytics	
or DS 2000	Programming with Data	
and DS 2001	and Data Science Programming Practicum	

### Integrative Requirements

Code	Title	Hours
<b>Development Economics</b>		
ECON 1291	Development Economics	4
<b>Senior Seminar</b>		
Complete one of the following with a thesis or project that integrates both international affairs and economics:		
ECON 4692	Senior Economics Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

### International Affairs and Economics Combined-Major GPA

Grades in the following Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4

### International Affairs and Economics Combined-Major Credit Requirement

Complete 88 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	MATH 1231	4	ECON elective 1	4	Elective	4
INTL 1101	4	ECON 1116	4	Elective	4	Elective	4
ECON 1115	4	POLS 1160	4				
ENGW 1111	4	HIST 2211	4				
Foreign language core course	4						
		17			16	8	8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1100	4	ECON 2350	4	ECON elective 2	4	Co-op	0
ECON 2315	4	INTL elective	4	Elective	4		
INTL elective	4	Foreign language core course	4				
Foreign language core course	4	ECON 2316	4				
		16			16	8	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL 3400	4	Elective	4	Co-op	0
		Elective	4	INTL elective	4		
		ECON 3520	4				
		INTL Elective	4				
		0			16	8	0
Year 4							
Fall	Hours	Spring	Hours				
Co-op	0	ECON elective 3	4				
		INTL elective	4				
		Elective	4				
		ECON 4692	4				

or INTL  
4700

0 16

Total Hours: 129

## Political Science and Economics, BA

The combined major in political science and economics offers students the opportunity to integrate the study of politics and government with the study of economics. Students complete the core courses in political science along with core courses in economics that cover both macroeconomic and microeconomic perspectives. This combined major highlights the important role that the economy plays in shaping politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2330	American Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four courses POLS2000 to POLS5999		16

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. ).

- American Political Institutions (p. 832)
- Campaigns and Elections (p. 832)
- Comparative Politics (p. 832)
- Identity, Culture, and Politics (p. 832)
- International Relations and Diplomacy (p. 832)
- Law and Legal Studies (p. 833)
- Public Policy (p. 833)
- Security Studies (p. 833)

### Economics Requirements for BA

Code	Title	Hours
<b>Breadth Courses</b>		
MATH 1231	Calculus for Business and Economics	4
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 3520	History of Economic Thought	4
<b>Economics Electives</b>		
Complete 3 Economics elective courses that are found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics elective:		12
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

#### COMBINATION A

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		
Complete one course within the following ranges, excluding ECON 3520. This course may not also be used as an Economics elective:		4
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

#### COMBINATION B

Code	Title	Hours
<b>Statistics</b>		
ECON 2350	Statistics	4
<b>Political Science</b>		

Complete one course in the following range:	4
POLS 2401 to POLS 5999	

### Integrative Requirements

Code	Title	Hours
<b>Senior Seminar/Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Combined Major GPA/Credit Requirement

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	MATH 1231	4	Elective	4	Elective	4
POLS 1155	4	POLS 1150	4	Elective	4	Elective	4
ECON 1115	4	CS 1100	4				
Elective	4	ECON 1116	4				
		16			16		
					8		
						8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	POLS 2400 or ECON 2350	4	Elective	4	Co-op	0
POLS elective	4	POLS elective	4	Political Theory Course	4		
ECON 2315	4	ECON 2316	4				
		Elective	4				
ECON elective 1	4						
		16			16		
					8		
						0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	ECON elective 3	4	Co-op	0
		POLS elective	4	ENGW 3315	4		
		ECON elective 2	4				
		ECON 3520	4				
		0			16		
					8		
						0	

Year 4			
Fall	Hours	Spring	Hours
Co-op		POLS 4701, 4703, or ECON 4692	4
		Elective	4
		ECON or POLS elective (See Supporting Courses, Combinations A and B.)	4
		Elective	4
		0	16

Total Hours: 128

**Economics, BS**

The Bachelor of Science degree focuses attention on the use of mathematics in economic models in the six core courses and many of the required seven electives. The BS degree allows ample room to take courses such as economic development, game theory, and mathematical economics in addition to more supporting courses in the mathematics and computer science departments. Students considering future doctoral studies in economics are strongly encouraged to pursue a double major in economics (BS) and mathematics (BS) or to choose our combined economics/mathematics major.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.



## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Economics Major Requirements for BS

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Senior Seminar</b>		
ECON 4692	Senior Economics Seminar	4

## Electives for BS in Economics

Code	Title	Hours
Complete seven courses found in the following ranges, with no more than two at the 1000 level:		28
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

## Breadth Courses for Economics Major

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
or DS 2000	Programming with Data	
and DS 2001	and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	

## 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 abroad or co-op:		4
ECON 4970	Junior/Senior Honors Project 1	
ECON 4971	Junior/Senior Honors Project 2	
ECON 4992	Directed Study	
ECON 4996	Experiential Education Directed Study	

## Economics Major GPA/Credit Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 64 semester hours in the major.

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	ECON 1116	4	ECON elective 2	4	Elective	4
ENGW 1111	4	CS 1100	4	Elective	4	Elective	4
MATH 1231	4	ECON elective 1	4				
Elective	4	Elective	4				
ECON 1000	1						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2315	4	ECON 2316	4	Elective	4	Co-op	0
ECON 2350	4	ECON elective 3	4	ECON elective 4	4		
Elective	4	Elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
		16		17		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3308	4	ECON elective 6	4	Co-op	0
		ECON elective 5	4	Elective	4		
		ECON 2560	4				
		Elective	4				
		0		16		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 2	Hours		
Co-op	0	ECON elective 7	4				
		Elective	4				
		Elective	4				
		ECON 4692	4				
		0		16		0	

Total Hours: 130

## Computer Science and Economics, BS

The combined major in computer science and economics integrates fundamental economics courses with a strong programming foundation. Studying both the behavior of individuals and the collective behavior of industries and governments, students will utilize computing skills to address complex issues within the field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4
Choose one		4
IS 4200	Information Retrieval	
IS 4300	Human Computer Interaction	
IS 4700	Social Information Systems	
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective</b>		

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 8 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	8
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

### Economics Requirements

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 4 Economics elective courses from the following ranges with no more than 2 at the ECON 1200 – ECON 1999 range:	16	
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
<b>Economics Capstone</b>		
ECON 4692	Senior Economics Seminar	4

### Integrative Course Requirement

Code	Title	Hours
The following courses are used in other areas of the major:		
IS 2000	Principles of Information Science	4
ECON 2560	Applied Econometrics	4

### Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231 or MATH 1341	Calculus for Business and Economics Calculus 1 for Science and Engineering	4
<b>Computing and Social Issues</b>		
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	

SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

### Computer Science English Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Economics GPA Requirement

Grades in the following required Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Computer Science and Economics Major Credit Requirement

Minimum of 100 SH is required in the major.

### Program Requirement

134 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3200	4	Elective	4
CS 1800 and CS 1802	5	IS 2000	4	CS 3500	4	Elective	4
CS 2500 and CS 2501	5	ECON 1116	4				
ECON 1115	4	MATH 1231 or 1341	4				
ENGW 1111	4						
		19		17		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 2800 and CS 2801	5	CS 1210	1	Elective	4	Co-op	4
CS 3000	4	Khoury Elective	4	Elective	4		
ECON 2315	4	ECON 2316	4				
ECON 2350	4	ECON elective 1	4				
		Elective	4				
		17		17		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury Elective	4	ENGW 3302	4	Co-op	4
		ECON elective 2	4	Elective	4		
		Computing and social issues requirement	4				
		ECON 2560	4				
		THTR 1170	1				
		0		17		8	
Year 4							
Fall	Hours	Spring	Hours				
Co-op		CS elective 3	4				
		ECON 4692	4				
		ECON elective 3	4				
		ECON elective 4	4				
		0		16			

Total Hours: 135

## Cybersecurity and Economics, BS

The cybersecurity and economics combined degree applies a multidisciplinary approach integrating fundamental economics courses with a strong programming foundation. Students will study both the behavior of individuals and the collective behavior of industries and

governments, utilizing computing skills to ensure the reliability and security of cyberspace.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

## Cybersecurity Major Requirements

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ECON 1000	First Year Seminar Economics at Northeastern	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamentals Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3650	Computer Systems	4
CS 3700	Networks and Distributed Systems	4
<b>Cybersecurity Required Courses</b>		
CY 2550	Foundations of Cybersecurity	4
CY 3740	Systems Security	4
CY 4740	Network Security	4
CY 4170 or CY 5240	The Law, Ethics, and Policy of Data and Digital Technologies Cyberlaw: Privacy, Ethics, and Digital Rights	4
<b>Cybersecurity Elective</b>		
Complete one of the following:		4
CS 2800	Logic and Computation	
CS 4710	Mobile and Wireless Systems	
CS 4400	Programming Languages	
CS 4500	Software Development	
CS 4240	Large-Scale Parallel Data Processing	
CY 4770	Cryptography	
DS 4300	Large-Scale Information Storage and Retrieval	
DS 4400	Machine Learning and Data Mining 1	
CY 5200	Security Risk Management and Assessment	

CY 5210	Information System Forensics	
CY 5770	Software Vulnerabilities and Security	
IS 4300	Human Computer Interaction	
EECE 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 4040	Crime Prevention	
CRIM 3400	Corporate Security: Securing the Private 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	
<b>Computer Science Senior Seminar</b>		
THTR 1170	The Eloquent Presenter	1

## Supporting Course

Code	Title	Hours
MATH 1341 or MATH 1231	Calculus 1 for Science and Engineering Calculus for Business and Economics	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
Complete one of the following:		4
ENGW 1111	First-Year Writing	
ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Economics Requirements

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
<b>Electives</b>		
Complete 4 ECON electives that are found in the following ranges, with at least two numbered at ECON 3000 or above:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Integrative Requirement

Code	Title	Hours
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
CY 4930	Cybersecurity Capstone	
CY 4940	Research Projects on National Security	

### Integrative Requirement

ECON 2560	Applied Econometrics	4
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### Required General Electives

Code	Title	Hours
Complete 24 credits of general electives.		24

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Economics GPA Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

### Program Requirement

133 total semester hours required.

### Plan of Study

#### Sample Plan of Study: Four Years, Two Co-ops in Summer 2/ Fall

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 1200	1	CS 2510 and CS 2511	5	Elective	4	Elective
CS 2500 and CS 2501	5	CY 2550	4	Elective	4	Elective

CS 1800 and CS 1802	5	ECON 1116	4			
ENGW 1111	4	MATH 1341	4			
ECON 1115	4					
		19	17	8	8	
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 3500	4	CS 3000	4	Elective	4	Co-op
CS 3650	4	CS 1210	1	Elective	4	
ECON 2315	4	CS 3700	4			
ECON 2350	4	ECON 2316	4			
		ECON elective 1	4			
		16	17	8	8	0
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		CY 3740	4	ECON elective 3	4	Co-op
		ECON 2560	4	ENGW 3302	4	
		THTR 1170	1			
		Cybersecurity Elective	4			
		ECON elective 2	4			
		0	17	8	8	0
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op		CY 4170	4			
		CY 4740	4			
		Capstone	4			
		ECON elective 4	4			
		0	16			

Total Hours: 134

## 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. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000	Economics at Northeastern	1
or BUSN 1102	Personal Skill Development for Business	
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or MGSC 2301	Business Statistics	
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 4 courses that are found in the following ranges, with no more than one at the introductory (1000) level:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4
<b>International Business/Social Responsibility</b>		
INTB 1203	International Business and Global Social Responsibility	4

## Business Concentration

Complete one of the following business concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)

- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Business Cooperative Education Requirement

Complete one six-month co-op experience.

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Computer Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
MISM 2510	Fundamentals of Information Analytics	
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	
<b>Capstone Requirement</b>		
ECON 4692	Senior Economics Seminar	4
STRT 4501	Strategy in Action	4

## Economics GPA Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or MGSC 2301	Business Statistics	
ECON 2560	Applied Econometrics	4

## Business GPA Requirement

Minimum 2.000 GPA required in business courses

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ACCT 1201	4	ECON 1116	4	ECON 2315	4	MKTG 2201	4
ECON 1000 or BUSN 1102	1	MGSC 2301 or ECON 2350	4	NUpath DD	4	FINA 2201	4



ENGW 1111	4	FINA 2201	4
MATH 1231	4	INTB 1203	4
ECON 1115	4		
	17	16	8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	Co-op		Co-op		Elective	4
ACCT 2301	4					ORGB 3201	4
CS 1100, MISM 2510, or DS 2000 and DS 2001	4						
BUSN 1103 or EESH 2000	1						
Economics Elective 1	4						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2560	4	Co-op		Co-op		Advanced Writing	4
Concentration Course 1	4					Elective	4
Concentration Course 2	4						
Economics Elective 2	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
Concentration Course 3	4	ECON 4692	4
Economics Elective 3	4	Concentration Course 4	4
STRT 4501	4	Economics Elective 4	4
Elective	4	Elective	4
	16		16

Total Hours: 130

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or MATH 1000	Economics at Northeastern Mathematics at Northeastern	1
<b>Required Economics</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 4 economics electives found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range:		16
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Mathematics Requirements

Code	Title	Hours
<b>Required Mathematics</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Mathematics Electives</b>		
Complete two courses in the following range:		8
MATH 3001 to MATH 4999		
The following courses are recommended:		
MATH 3150	Real Analysis	
MATH 4581	Statistics and Stochastic Processes	

### Breadth Course

Code	Title	Hours
<b>Computer Science</b>		
Choose one of the following:		4
CS 1100	Computer Science and Its Applications	

DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum
MISM 2510	Fundamentals of Information Analytics

### Integrative Requirements

Code	Title	Hours
<b>Advanced Writing in the Disciplines</b>		
ENGW 3308	Advanced Writing in the Social Sciences	4

#### Integrative Course

Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

### Combined-Major GPA/Credit Requirement

Code	Title	Hours
Grades in the following 4 Economics courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2560	Applied Econometrics	
MATH 3081	Probability and Statistics	

A cumulative GPA of 2.000 is required in all math courses. A grade of C or higher is required in all math courses numbered MATH 2999 or below; grades below C will not count toward the degree.

### Economics and Mathematics Major Credit Requirement

Complete 76 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	ECON 1116	4	MATH 2321	4	Elective	4
MATH 1365	4	MATH 1342	4	Elective	4	Elective	4
MATH 1341	4	ENGW 3308	4				
CS 1100	4	Elective	4				
		16			16	8	8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2315	4	ECON 2316	4	Elective	4	Co-op	
MATH 2341	4	ECON elective 1	4	MATH 3081	4		
Elective	4	MATH 2331	4				
Elective	4	Math elective 1	4				
		16			16	8	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 2560	4	Elective	4	Co-op	

ECON elective 2	4	Elective	4
Math elective 2	4		
Elective	4		
		0	16
		8	0

#### Year 4

Fall	Hours	Spring	Hours
Co-op		ECON elective 3	4
		ECON elective 4	4
		ECON 4692, MATH 4025, or MATH 5131	4
		Elective	4
		0	16

Total Hours: 128

### 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
ECON 1000	Economics at Northeastern	
PHIL 1000	Philosophy at Northeastern	

#### 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
ECON 3520	History of Economic Thought	4
MATH 1231	Calculus for Business and Economics	4

**Economics Electives**

Complete 2 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics Elective.

ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

**Philosophy Requirements**

Code	Title	Hours
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**Philosophy Required Courses**

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
PHIL 2330	Modern Philosophy	4

**Advanced Philosophy Elective**

Complete one of the following: 4

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete three additional electives in philosophy or religion. At least one must be numbered 2000 or above. 12

**Integrative Requirements**

Code	Title	Hours
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Complete PHIL 4550 and one of the other courses listed below that has not been used in above requirements: 8

PHIL 4550	Philosophy of Economics	
PHIL 3435	Moral Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	

PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

**Major GPA/Credit Requirement**

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	PHIL 1115	4	ECON elective 1	4	Elective	4
PHIL 1000 or ECON 1000	1	POLS 2325	4	Elective	4	Elective	4
ECON 1115	4	MATH 1231	4				
Elective	4	ECON 1116	4				
Elective	4						
		17	16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 2330	4	PHIL Advanced Elective	4	PHIL Advanced Elective	4	Co-op	4
ECON 2315	4	ECON 2560	4	ENGW 3302, 3302, or 3315	4		
ECON 2350	4	PHIL Integrative Course	4				
ECON elective 2	4	ECON 2316	4				
		16	16		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Integrative Course	4	Elective	4	Co-op	4
		Computing and Social Issues Requirement	4	Elective	4		
		Elective	4				
		ECON 2560	4				
		0	16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		PHIL Intermediate/ Advanced Elective	4
		PHIL Capstone	4
		ECON 4692	4
		ECON 3520	4
	0		16

Total Hours: 129

**Economics and Psychology, BS**

This combined major educates students in economics and psychology and the interface between the two disciplines. Economics courses provide a foundation in macroeconomics, microeconomics, and applied econometrics. The scope and sequence of psychology courses provide students with a foundation in the interdisciplinary science of psychology, including such topics as cognition, decision making, learning, and motivation. Students completing this program of study should be able to understand how the two fields jointly contribute to explaining the complexity of human behavior in an economic context.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Economics Requirements**

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
ECON 4692	Senior Economics Seminar	4

**Economics Electives**

Complete four ECON courses from the following ranges with no more than two at the ECON 1200–ECON 1999 range. The course used to satisfy the integrative course requirement may not be used as an economics elective: 16

ECON 1200–ECON 1999
ECON 3000–ECON 4689
ECON 4900–ECON 4999
ECON 5200–ECON 5999

**Psychology Requirements**

Code	Title	Hours
<b>Required Courses</b>		
PSYC 1101	Foundations of Psychology	4
PSYC 2320	Statistics in Psychological Research	4
PSYC 3402	Social Psychology	4
PSYC 3450	Learning and Motivation	4
PSYC 3466	Cognition	4

**Required Lab**

Complete one of the following:		4
PSYC 4600	Laboratory in Research Design	
PSYC 4606	Laboratory in Biological Psychology	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4612	Laboratory in Cognition	
PSYC 4614	Laboratory in Social Psychology	
PSYC 4616	Laboratory in Personality	
PSYC 4622	Laboratory in Sensation and Perception	
PSYC 4624	Laboratory in Affective Science	
PSYC 4626	Laboratory in Life-Span Emotional Development	
PSYC 4628	Laboratory in Developmental Psychology	

**Required Seminar**

Complete one of the following:		4
PSYC 4654	Seminar in Behavioral Modification	
PSYC 4656	Seminar in Biological Psychology	
PSYC 4658	Seminar in Psycholinguistics	
PSYC 4660	Seminar in Cognition	
PSYC 4662	Seminar in Personality	
PSYC 4664	Seminar in Social Psychology	
PSYC 4666	Seminar in Clinical Psychology	
PSYC 4668	Seminar in Sensation and Perception	
PSYC 4674	Seminar in Cognitive Neuroscience	
PSYC 4676	Seminar in Developmental Psychology	
PSYC 4678	Seminar in Social and Affective Neuroscience	

**Psychology Electives**

Complete three PSYC courses not used to fulfill requirements above. 12

**Other Requirements Outside Major**

Code	Title	Hours
PSYC 1000 or ECON 1000	Psychology at Northeastern Economics at Northeastern	1
EESC 2000 or EESH 2000	Professional Development for Co-op Professional Development for Co-op	1
ENGW 1111	First-Year Writing	4
MATH 1231 or MATH 1341	Calculus for Business and Economics Calculus 1 for Science and Engineering	4

CS 1100	Computer Science and Its Applications	4
COOP 3945	Co-op Work Experience	0

### Integrative Course

Code	Title	Hours
ECON 4681	Information Economics and Game Theory	4
or ECON 3416	Behavioral Economics	

### NUpath Not Fulfilled by Major

Code	Title	Hours
NUPath EI—Expression and Innovation		4
NUPath IC—Interpreting Culture		4
NUPath DD—Difference and Diversity		4
NUPath ER— Ethical Reasoning		4
NUPath WD—Advanced Writing in the Discipline		4

### Open Electives

Code	Title	Hours
	Complete three open electives.	12

### Combined Major Credit/ GPA Requirement

Complete 84 semester hours in the major.

Grades in the following required courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
PSYC 2320	Statistics in Psychological Research	4

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 1101	4	PSYC 2320	4	ECON elective	4	Open elective	4
MATH 1213 or 1341	4	ECON 1116	4	PSYC elective	4	ECON elective	4
ENGW 1111	4	CS 1100	4				
ECON 1115	4	PSYC elective	4				
ECON 1000 or PSYC 1000	1						
	17		16		8		8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3402	4	PSYC 3466	4	NUPath DD	4	Co-op	
ECON 2315	4	ECON 2316	4	PSYC elective	4		
ECON elective	4	NUPath IC	4				

NUPath EI	4	Open elective	4				
		EESC 2000 or EESH 2000	1				
	16		17		8		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		PSYC 3450	4	ECON 4692	4	Co-op	
		ECON 2560	4	PSYC lab	4		
		ECON elective	4				
		NUPath ER	4				
	0		16		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op		ECON 4681 or 3416	4				
		PSYC seminar	4				
		NUPath WD	4				
		Open elective	4				
	0		16				

Total Hours: 130

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Introduction to College

Code	Title	Hours
ECON 1000 or ENVR 1000	Economics at Northeastern Marine and Environmental Sciences at Northeastern	1

### Economics Requirements

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3423	Environmental Economics	4
<b>Economics Electives</b>		
Complete 2 Economics elective courses found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range. ECON 3423 cannot count as an Economics Elective:		
ECON 1200 to ECON 1999		7-8
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### Environmental Studies Requirements

Code	Title	Hours
<b>Social Science Component</b>		
PHIL 1180	Environmental Ethics	4
POLS 1150 and POLS 1151	American Government and Recitation for POLS 1150	4
POLS 2395	Environmental Politics and Policy	4
SOCL 1246	Environment and Society	4
<b>Science Component</b>		
ENVR 1101	Environmental Science	4
ENVR 1112 or ENVR 1200	Environmental Geology Dynamic Earth	4
ENVR 1450	Introduction to Sustainability Science	4
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>GPA Requirement</b>		
Students are required to earn a GPA of 2.000 in either PHIL 1180 or PHIL 3480 and in ENVR 1101.		
<b>Environmental Science Elective</b>		
Complete one environmental science elective in consultation with the environmental studies head adviser.		

### Integrative Requirements

Code	Title	Hours
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following: 4		
ENGW 3307	Advanced Writing in the Sciences	
ENGW 3308	Advanced Writing in the Social Sciences	
<b>Integrative Course</b>		

Note: Your integrative course and your capstone course (below) must be from different departments.  
 Complete one of the following: 4

ECON 4692	Senior Economics Seminar	
ENVR 5210	Environmental Planning	

**Capstone**  
 Note: Your integrative course (above) and your capstone course must be from different departments.

ECON 4692	Senior Economics Seminar	4
or ENVR 4997	Senior Thesis	
or ENVS 4997	Senior Thesis	

### Experiential Learning Requirement

Code	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 GPA/Credit Requirement

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 84 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1000 or ECON 1000	1	CS 1100	4	ECON 2315	4	Elective	4
MATH 1231	4	ECON 1116	4	Elective	4	Elective	4
ECON 1115	4	SOCL 1246	4				
PHIL 1180	4	ENVR 1101	4				
POLS 1150	4						
POLS 1151	0						
	17		16		8		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2316	4	ECON 2350	4	ECON 2560	4	Co-op	
POLS 2395	4	ENVR 1450	4	Elective	4		
ENVR 1112 or 1200	4	ECON elective 1	4				



ENVR elective		4 Elective	4			8	0
		16	16			8	0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		ECON 3423	4	Elective	4	Co-op	
		ENVR 3300	4	Elective	4		
		ENVR 3301	1				
		ECON elective 2	4				
		ENGW 3307 or 3308	4				
		0	17			8	0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op		ECON 4692 or ENVR 5210	4				
		ENVS 4997, ENVR 4997, or ECON 4692	4				
		Elective	4				
		Elective	4				
		0	16				

Total Hours: 130

## History and Economics, BS

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### History Requirements

Code	Title	Hours
HIST 1200	Historical Research and Writing	1

HIST 1201	First-Year Seminar	4
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### Introductory Level

Complete one history course from the 1000 level except from HIST 1200 and HIST 1201.	4
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### 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:	4	
HIST 2390	Africa and the World in Early Times	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1185	Introduction to Middle Eastern History	
HIST 2370	Renaissance to Enlightenment	
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 Courses

Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.	16
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### Advanced History

Complete one history course at the 3000 level or above.	4
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### Supplemental Course for History—Research Methods

Complete one of the following:	4	
ECON 2350	Statistics	
ENVR 5260	Geographical Information Systems	
MATH 2280	Statistics and Software	
POLS 2400	Quantitative Techniques	
PSYC 2320	Statistics in Psychological Research	
SOCL 2320	Statistical Analysis in Sociology	

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or HIST 1000	Economics at Northeastern History at Northeastern	1
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

### Economics Electives

Complete four economics elective courses that are found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement may not be used as economics electives:	16
ECON 1200 to ECON 1999	
ECON 3000 to ECON 4689	
ECON 4900 to ECON 4999	
ECON 5200 to ECON 5999	

**Supplemental Courses**

CS 1100	Computer Science and Its Applications	4
MATH 1231	Calculus for Business and Economics	4

**Capstone Requirements**

Code	Title	Hours
Complete one of the following options (public history concentrations complete HIST 4903 and HIST 4904):		
ECON 4692	Senior Economics Seminar	4
HIST 4701	Capstone Seminar	

**Integrative Requirements**

Code	Title	Hours
Complete one of the following:		
ECON 3470	American Economic History	4
ECON 1293	European Economic History	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

**History and Economics Major GPA/Credit Requirement**

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ECON 1000 or HIST 1000	1	ECON elective 1	4	ECON elective 2	4	Elective	4	
ECON 1115	4	HIST elective 1	4	Elective	4	Elective	4	
HIST 1200	1	HIST elective 2	4					
HIST 1201	4	ECON 1116	4					
MATH 1231	4							
Elective	4							
		18			16			8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
HIST 2301	4	HIST elective 3	4	HIST elective 5	4	Co-op		
HIST 2302	1	HIST elective 4	4	Elective	4			
CS 1100	4	ECON 2316	4					
ECON 2315	4	Elective	4					

Elective	4							
		17			16			8
								0
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Co-op		ECON 2350	4	ECON 2560	4	Co-op		
		ECON elective 3	4	ECON elective 4	4			
		HIST elective 6	4					
		Elective	4					
		0			16			8
								0
Year 4								
Fall	Hours	Spring	Hours					
Co-op		ECON 4692 or HIST 4701	4					
		ECON 3470, HIST 2360, HIST 2011, or ECON 1293	4					
		HIST elective 7	4					
		Elective	4					
		0			16			

Total Hours: 131

**Political Science and Economics, BS**

The combined major in political science and economics offers students the opportunity to integrate the study of politics and government with the study of economics. Students complete the core courses in political science along with core courses in economics that cover both macroeconomic and microeconomic perspectives. This combined major highlights the important role that the economy plays in shaping politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four courses from the following range, or complete a concentration as outlined below:		16
POLS 2000 to POLS 5999		

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 848).

- American Political Institutions (p. 848)
- Campaigns and Elections (p. 849)
- Comparative Politics (p. 849)
- Identity, Culture, and Politics (p. 849)
- International Relations and Diplomacy (p. 849)
- Law and Legal Studies (p. 849)
- Public Policy (p. 849)
- Security Studies (p. 849)

## Economics Requirements for BS

Code	Title	Hours
<b>Breadth Courses</b>		
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	
MATH 1231	Calculus for Business and Economics	4
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
<b>Economics Electives</b>		
Complete 3 Economics elective courses found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range:		12
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

## Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

### COMBINATION A

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		
Complete one course from the following ranges. This course may not also be used as an Economics elective:		4
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

### COMBINATION B

Code	Title	Hours
<b>Statistics</b>		
ECON 2350	Statistics	4
<b>Political Science</b>		
Complete one course in the following range:		4
POLS 2401 to POLS 5999		

## Integrative Requirements

Code	Title	Hours
<b>Senior Seminar/Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

## Combined Major GPA/Credit Requirement:

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
ECON 2560	Applied Econometrics	4

## Program Requirement

128 total semester hours required.

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	

POLS 3160	Campaign Strategy
POLS 3162	Local Campaigns and Elections

POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	

POLS 3423	Terrorism and Counterterrorism
POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	MATH 1231	4	Elective	4	Elective	4
POLS 1155	4	POLS 1150	4	Elective	4	Elective	4
ECON 1115	4	CS 1100	4				
Elective	4	ECON 1116	4				
		16	16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	POLS 2400 or ECON 2350	4	Elective	4	Co-op	0
POLS undergraduate elective	4	POLS undergraduate elective	4	Political Theory Course	4		
ECON 2315	4	ECON 2316	4				
ECON elective 1	4	ECON elective 2	4				
		16	16		8		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	0
		POLS undergraduate elective	4	ECON elective or POLS elective <sup>See</sup> Supporting Courses, Combinations A and B.	4		
		ECON elective 3	4				
		ECON 2560	4				
		0	16		8		0

#### Year 4

Fall	Hours	Spring	Hours
Co-op		POLS 4701, 4703, or ECON 4692	4
		Elective	4
		Elective	4
		Elective	4
		0	16

Total Hours: 128

## Politics, Philosophy, and Economics, BS

Website (<https://www.northeastern.edu/cssh/ppe/>)

371 Holmes Hall  
617.373.3636  
617.373.4359 (fax)

The PPE major at Northeastern University brings together three of the most important approaches to understanding the world around us: political science, philosophy, and economics. The PPE major is an interdisciplinary degree that not only provides students with the analytic tools from three different disciplines but also teaches students to make connections across disciplines and to keep multiple perspectives in mind when analyzing complex social phenomena. This interdisciplinary perspective and set of skills are indispensable in our increasingly interconnected world and are essential in addressing the kinds of complex global problems future leaders will need to tackle.

There are a number of varieties of the PPE major that students may choose from in accordance with their own backgrounds and interests. These include:

- environment and energy policy
- international political economy
- law and justice
- logic and game theory
- political philosophy
- public and economic policy

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Politics, Philosophy, and Economics Major Requirements

Code	Title	Hours
<b>Foundation Course</b>		
PHIL 1160	Introduction to Economic Justice	4
<b>Core Courses</b>		
<i>Philosophy</i>		
PHIL 2303	Social and Political Philosophy	4
PHIL 1115	Introduction to Logic	4

PHIL 3435 or PHIL 2325	Moral Philosophy Ancient Philosophy and Political Thought	4
<i>Political Science</i>		
POLS 1160	International Relations	4
POLS 3405	International Political Economy	4
POLS 1150 or POLS 1155	American Government Comparative Politics	4
<i>Economics</i>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315 or ECON 2316	Macroeconomic Theory Microeconomic Theory	4
<b>Methods Course</b>		
PHIL 3000	Interdisciplinary Methods for PPE	4
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
PHIL 4550	Philosophy of Economics	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Major Electives**

Code	Title	Hours
Complete two of the following:		8
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
PHIL 2000 to PHIL 5999		
POLS 2000 to POLS 5999		

**Concentration**

Complete one of the following concentrations:

- Environment and Energy Policy (p. )
- International Political Economy (p. )
- Law and Justice (p. )
- Logic and Game Theory (p. )
- Political Philosophy (p. )
- Public and Economic Policy (p. )

**Supporting Courses**

Code	Title	Hours
<b>Racial or Gender Justice</b>		
Complete one of the following:		4
AFAM/POLS 2360	Politics of Poverty	
CRIM 4010	Gender, Crime, and Justice	
HIST 1225	Gender, Race, and Medicine	
HIST 2000	Native American Resistance: Past and Present	
HUSV 3900	Social Policy	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 3500	Sexuality, Gender, and the Law	

POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL/WMNS 1260	Gender in a Changing Society	
SOCL 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	
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 or POLS 2400 or MATH 2280	Statistics Quantitative Techniques 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	

**Major GPA/Credit Requirement**

Complete 68 semester hours in the major with a 3.000 GPA.

Code	Title	Hours
<b>Economics GPA Requirement:</b>		
Grades in the following courses must average to a minimum of C (2.000):		
ECON 2315 or ECON 2316	Macroeconomic Theory Microeconomic Theory	
ECON 2350 or POLS 2400 or MATH 2280	Statistics Quantitative Techniques Statistics and Software	

**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:		
ECON 3423	Environmental Economics	8
or ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	8
or PHIL 1185	The Ethics of Food	
POLS 2395	Environmental Politics and Policy	4
Complete one of the following:		
ECON 3423	Environmental Economics	4
ECON 3425	Energy Economics	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	

**CONCENTRATION IN INTERNATIONAL POLITICAL ECONOMY**

Code	Title	Hours
Complete two of the following:		
ECON 1291	Development Economics	8
ECON 2316	Microeconomic Theory	
ECON 3290	History of the Global Economy	8
ECON 3404	International Food Policy	
ECON 4635	International Economics	4
PHIL 1185	The Ethics of Food	
PHIL 1170	Business Ethics	4
POLS 3406	International Law	
POLS 3487	Politics of Developing Nations	4
Complete one of the following:		
ECON 1292	Economic History of the Middle East	4
ECON 1293	European Economic History	
HIST 2360	History of Capitalism in East Asia	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	4
HIST 2011	Capitalism and Business: A Global History	

**CONCENTRATION IN LAW AND JUSTICE**

Code	Title	Hours
Complete three of the following, only two of which may be POLS courses:		
ECON 3424	Law and Economics	12
ECON 1240	Economics of Crime	
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2155	Human Rights	8
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3500	Sexuality, Gender, and the Law	4
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

POLS 3302	Judicial Process and Behavior	4
POLS 3324	Law and Society	
POLS 3406	International Law	4
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	4
WMNS 3500	Sexuality, Gender, and the Law	
HIST 2280	Hitler, Germany, and the Holocaust	4
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 3335	History of Modern Terrorism	

**CONCENTRATION IN LOGIC AND GAME THEORY**

Code	Title	Hours
<b>Required Course</b>		
PHIL 1115	Introduction to Logic	4
<b>Electives</b>		
Complete two of the following:		
ECON 4681	Information Economics and Game Theory	8
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	4
PHIL 2050	Information and Uncertainty	
PHIL 4515	Advanced Logic	4

**CONCENTRATION IN POLITICAL PHILOSOPHY**

Code	Title	Hours
<b>Politics Courses</b>		
Complete two of the following:		
POLS 2328	Modern Political Thought	8
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	4
<b>Philosophy Course</b>		
Complete one of the following:		
PHIL 2155	Human Rights	4
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3435	Moral Philosophy	4
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	4
PHIL 5002	Ethics and Public Policy	

**CONCENTRATION IN PUBLIC AND ECONOMIC POLICY**

Code	Title	Hours
<b>Required Course</b>		
POLS 3307	Public Policy and Administration	4
<b>Elective Courses</b>		
Complete two of the following:		
ECON 1240	Economics of Crime	8
ECON 1281	Economics of the Creative Industries	
ECON 3410	Labor Economics	4
ECON 3414	Economics of Human Capital	
ECON 3420	Urban Economic Issues	4
ECON 3422	Economics of Transportation	
ECON 3423	Environmental Economics	4
ECON 3425	Energy Economics	

ECON 3440	Public Finance
ECON 3490	Public Choice Economics
ECON 4680	Competition Policy and Regulation
HIST 2331	The Civil War and Reconstruction
HIST 2339	America's Gilded Age, 1865-1896
HIST 3800	American Conservatism from the New Deal to the Present
PHIL 1160	Introduction to Economic Justice
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
POLS 2340	Business and Government
POLS 2360	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

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops Summer 2/ Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1160	4	ENGW 1111	4	Elective	4	Vacation	
PHIL 1000	1	ECON 1116	4	Elective	4		
MATH 1231	4	PHIL 1115	4				
POLS 1160	4	PHIL 2303	4				
General Elective							
General Elective	4						
	17		16		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	Statistics and Mathematics Requirement	4	Elective	4	Co-op	
POLS 1150 or 1155	4	ECON 2315 or 2316	4	Elective	4		
PHIL 3435 or 2325	4	Major Elective	4				
Supporting Course in Race or Gender Justice	4	Concentration Course	4				
	16		16		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL 3000	4	General Elective	4	Co-op	
		General Elective	4	General Elective	4		
		Major Elective	4				
		Concentration Course	4				
	0		16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Concentration Course	4	General Elective	4		
		Capstone Requirement	4	General Elective	4		
		General Elective	4				
		General Elective	4				
	0		16		8		

Total Hours: 129

### Economics, Minor

The minor in economics introduces students to fundamental concepts in economics such as market demand and supply, how firms compete with each other, household choice and behavior under scarcity constraints, government fiscal and monetary policy, inflation, unemployment, and growth and instability. Economics elective courses explore further topics such as international trade, development economics, food supply chain policy, the environmental costs of growth, the economic aspects of natural resources, poverty, healthcare markets, labor market discrimination, trade unions, crime, and government regulation, among others. Students are also exposed to historical perspectives and to international and comparative perspectives on these topics.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any prerequisites, corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Take one of the following two-course sequences:		
ECON 1115 and ECON 2315	Principles of Macroeconomics and Macroeconomic Theory	8
ECON 1116 and ECON 2316	Principles of Microeconomics and Microeconomic Theory	

### Elective Courses

Code	Title	Hours
Complete three courses from the following ranges, with no more than one in the ECON 1200 to ECON 1999 range:		
ECON 1200 to ECON 1999		12
ECON 3000 to ECON 4689		

ECON 4900 to ECON 4999

ECON 5200 to ECON 5999

**GPA Requirement**

Minimum of 2.000 GPA required in the minor

**English**Website (<http://www.northeastern.edu/english/>)**Chair****Professor Neal Lerner, EdD**

405 Lake Hall  
617.373.4540  
617.373.2509 (fax)

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.

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. 27).”

**Half-Major Templates for Combined Majors**

The Department of English offers preapproved template programs in both **English** and **writing** 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 adviser.

**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. 854)
- English and Communication Studies (p. 145)
- English and Criminal Justice (p. 771)
- English and Cultural Anthropology (p. 866)
- English and Graphic and Information Design (p. 105)
- English and Philosophy (p. 870)
- English and Political Science (p. 873)
- English and Theatre (p. 245)
- History and English (p. 879)
- Journalism and English (p. 193)
- Linguistics and English (p. 632)
- Media and Screen Studies and English (p. 154)

**Bachelor of Science (BS)**

- Architecture and English (p. 61)
- Biology and English (p. 599)
- Computer Science and English (p. 343)

**Minor**

- English (p. 893)
- Rhetoric (p. 190)
- Writing (p. 893)

**Accelerated Programs**

See Accelerated Bachelor/Graduate Degree Programs (p. )

**English, BA**

Students in the English major study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures. They analyze writing practices and related media from the Middle Ages through the present, from the quill pen to code. They practice a variety of theoretical and methodological approaches to the study of language, rhetoric, writing, and literature.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## English Major Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ENGL 1000	English at Northeastern	1
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Writing Studies	4
ENGL 1700	Global Literature to 1500	4
<b>Literary Periods</b>		
<i>Early Literatures</i>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 3678 or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
<i>Seventeenth to Eighteenth Centuries</i>		
Complete one of the following:		4
ENGL 2240	17th-Century British Literature	
ENGL 2250	18th-Century British Literature	
ENGL 2296 or AFAM 2296	Early African-American Literature Early African-American Literature	
ENGL 3618	Milton	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<i>Nineteenth Century</i>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3619	Emerson and Thoreau	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
<i>Twentieth to Twenty-First Centuries</i>		
Complete one of the following:		4
ENGL 2301 or ARTE 2301	The Graphic Novel The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685 or JWSS 3685	Modern and Contemporary Jewish Literature Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
ENGL 4060	Topics in 20th- and 21st-Century Literatures	

## Comparative Literature

Complete two of the following:		8
ENGL 1120	Trouble in Utopia	
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2362	Modern and Contemporary African-American Literature	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450 or CLTR 2450	Postcolonial Literature Postcolonial Literature	
ENGL 2451 or WMNS 2451	Postcolonial Women Writers Postcolonial Women Writers	
ENGL 2451 or CLTR 2451	Postcolonial Women Writers Postcolonial Women Writers	
ENGL 2455 or AFAM 2455	American Women Writers Race American Women Writers and Race	
ENGL 2455 or WMNS 2455	American Women Writers Race American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
ENGL 2510	Horror Fiction	
ENGL 2520	Science Fiction	
ENGL 2620	What Is Nature? (Abroad)	
ENGL 2690 or AFAM 2690	Boston in Literature Boston in Literature	
ENGL 2695	Travel and Place-Based Writing	
ENGL 3487	Film and Text (Abroad)	
ENGL 3572	Fantasy Literature	
ENGL 3582	Children's Literature	
ENGL 3663 or AFAM 3663	The African-American Novel The African American Novel	
ENGL 3676 or WMNS 3676	Representing Gender and Sexuality in Literature Representing Gender and Sexuality in Literature	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to Writing Studies	
ENGL 2150	Literature and Digital Diversity	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3325	Rhetoric of Law	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3404 or AFAM 3404	African American Rhetorical Traditions African American Rhetorical Traditions	
ENGL 3700	Narrative Medicine	
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

**Advanced Writing in the Disciplines**

Complete one of the following: 4

ENGW 3310	Advanced Writing in Literature
ENGW 3311	Advanced Writing for Prelaw

**Writing**

Complete two of the following: 8

ENGL 2695	Travel and Place-Based Writing
ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	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	

**Diversity**

Complete one of the following courses, which can also count toward another requirement in the major: 4

ENGL 2150	Literature and Digital Diversity
ENGL 2296	Early African-American Literature
or AFAM 2296	Early African-American Literature
ENGL 2362	Modern and Contemporary African-American Literature
ENGL 2450	Postcolonial Literature
or CLTR 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
or WMNS 2451	Postcolonial Women Writers
or CLTR 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
or AFAM 2455	American Women Writers and Race
or WMNS 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
ENGL 2760	Writing in Global Contexts
ENGL 3404	African American Rhetorical Traditions
or AFAM 3404	African American Rhetorical Traditions
ENGL 3663	The African-American Novel
or AFAM 3663	The African American Novel
ENGL 3676	Representing Gender and Sexuality in Literature
or WMNS 3676	Representing Gender and Sexuality in Literature

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or WMNS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3900	Gender and Black World Literatures
or AFRS 3900	Gender and Black World Literatures
or WMNS 3900	Gender and Black World Literatures

**Electives**

Complete any two ENGL courses, except for First-Year Writing and Advanced Writing in the Disciplines, that has not already been used to fulfill another requirement. The following courses may also be used as electives: 8

LING 1150	Introduction to Language and Linguistics
LING 2350	Linguistic Analysis
LING 3450	Syntax
LING 3452	Semantics
LING 3454	History of English
LING 3456	Language and Gender
LING 3458	Topics in Linguistics

**Experiential Learning Requirement**

Complete one course in experiential learning from the list below or any Dialogues of Civilization experience. (Other study-abroad programs may not be used.) This course can also count toward another requirement in the major.

Code	Title	Hours
<b>Experiential Learning Course Work</b>		
ENGL 2690	Boston in Literature	
or AFAM 2690	Boston in Literature	
ENGL 2740	Writing and Community Engagement	
ENGL 3340	Technologies of Text	
ENGL 3370	Writing Cultures	
ENGL 3375	Writing Boston	
ENGL 3381	The Practice and Theory of Teaching Writing	
ENGL 3382	Publishing in the 21st Century	
ENGL 4400	Opening the Archive	

**Dialogues of Civilization**

Complete one Dialogues of Civilization experience, including but not limited to those offered by the department. (Other study-abroad programs may not be used.)

ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 2620	What Is Nature? (Abroad)
ENGL 3487	Film and Text (Abroad)

**English Major Credit Requirement**

Complete 64 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	ENGL 1410 or 1160	4				
ENGL 1400	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
Elective	4	EESH 2000	1				
		17	17	0	0		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative course elective	4	Comparative course elective	4	Vacation	0	Co-op	0
Literary period and diversity elective	4	Foreign language core course	4				
Elective	4	Literary period course elective	4				
Elective	4	Writing and experiential education elective	4				
		16	16	0	0		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Advanced Writing in the Disciplines	4	Writing elective	4	Co-op	0
		Literary period elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0	16	8	0		
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Literary period elective	4	English elective	4		
		Theories and methods elective	4	Elective	4		
		Elective	4				

English elective			
	4		
0	16	8	
Year 5			
Fall	Hours	Spring	Hours
Co-op	0	Capstone	4
		Elective	4
		Elective	4
		Elective	4
		0	16

Total Hours: 130

## Computer Science and English, BS

The computer science and English combined major focuses on the increasingly interdisciplinary processes of creating, interpreting, and analyzing texts and programs. Students will combine communication and critical judgment, gaining the creativity and adaptability necessary to utilize technology in literary studies, and apply humanities skills to solve programming problems.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Computer Science Courses

Code	Title	Hours
Computer Science Overview		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
Computer Science Fundamental Courses		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
Computer Science Required Courses		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4



**Computing Focus**

Students are required to complete one of the following foci (two courses total): 8

*Focus 1: Natural Language Processing*

CS 3800 Theory of Computation

CS 4120 Natural Language Processing

*Focus 2: Programming Languages*

CS 3800 Theory of Computation

CS 4400 Programming Languages

*Focus 3: Analytics*

DS 3000 Foundations of Data Science

DS 4200 Information Presentation and Visualization

**Presentation Requirement**

THTR 1170 The Eloquent Presenter 1

**Computer Science/Information Science Elective Course**

Choose one:

IS 2000 Principles of Information Science 4

CS 4500 Software Development 4

or CS 4530 Fundamentals of Software Engineering

**Khoury Elective Courses**

With adviser approval, a directed study, project study, or appropriate graduate-level course may also be taken as an upper-division elective.

Complete 4 credits of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges: 4

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000 English at Northeastern 1

**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: 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 Race

ENGL 2460 Multiethnic Literatures of the U.S.

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/JWSS 3678 Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 4000 Topics in Early Literatures

ENGL 4020 Topics in 17th- and 18th-Century Literatures

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330 The American Renaissance

ENGL 3720 19th-Century Major Figure

ENGL 4040 Topics in 19th-Century Literatures

ENGL 2301 The Graphic Novel

ENGL 2440 The Modern Bestseller

ENGL 2600 Irish Literary Culture (Abroad)

ENGL 2610 Contemporary Israeli Literature and Art (Abroad)

ENGL/JWSS 3685 Modern and Contemporary Jewish Literature

ENGL 3730 20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140 Grammar: The Architecture of English

ENGL 1160 Introduction to Rhetoric

ENGL 1410 Introduction to 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 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 1450 Reading and Writing in the Digital Age

ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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
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**Integrative Course Requirement**

This course will not be allowed to double-count in the Theories and Methods section above.

Code	Title	Hours
ENGL 3340	Technologies of Text	4

**Supporting Course**

Code	Title	Hours
Complete one of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	

CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights
ENGL 2150	Literature and Digital Diversity
HIST 2220	History of Technology
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks
IS 1300	Knowledge in a Digital World
or PHIL 1300	Knowledge in a Digital World
PHIL 1145	Technology and Human Values
SOCL 1280	The Twenty-First-Century Workplace
SOCL 3485	Environment, Technology, and Society
SOCL 4528	Computers and Society

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
Complete one course from the following:		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3309	Advanced Writing in the Humanities	
ENGW 3310	Advanced Writing in Literature	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 32 credits of general electives.		32

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Exploring Creative Expression and Innovation
- Writing in the First Year
- Advanced Writing in the Disciplines
- Writing-Intensive in the Major
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

132 total semester hours required

**Plan of Study**

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	ENGL 1160 or 1410	4	Elective	4		
CS 2500 and CS 2501	5	Elective	4				
ENGL 1400	4	English literary period 1	4				
ENGW 1111	4						
		19	17		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Strand elective 1	4	ENGW 3302, 3309, 3310, or 3315	4	Co-op	
CS 3200	4	CS 1210	1	Elective	4		
English literary period 2	4	IS 2000 (or English Category or Elective)	4				
English category or elective	4	English category or elective	4				
		ENGL 3340	4				
		16	17		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Strand elective 2	4	Elective	4	Co-op	
		English category or elective	4	Elective	4		
		English category or elective	4				
		Computing and social issues	4				
		THTR 1170	1				
		0	17		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		CS 4500 (or English Category or Elective)	4	Elective	4		
		ENGL 4710 or 4720	4	Elective	4		
		Khoury elective	4				

Elective	4		
0	16	8	

Total Hours: 134

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	ENGL 1160 or 1410	4				
CS 2500 and CS 2501	5	Elective	4				
ENGW 1111	4	English literary period 1	4				
ENGL 1400	4						
		19	17		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 3200	4	Vacation		Co-op	
CS 3500	4	CS 1210	1				
English literary period 2	4	IS 2000 (or English Category or Elective)	4				
English category or elective	4	English category or elective	4				
		ENGL 3340	4				
		16	17		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Strand elective 1	4	ENGW 3302, 3309, 3310, or 3315	4	Co-op	
		English category or elective	4	Elective	4		
		English category or elective	4				
		THTR 1170	1				
		0	17		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Strand elective 2	4	Elective	4	Co-op	
		Computing and social issues	4	Elective	4		
		Elective	4				
		Elective	4				
		0	16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	CS 4500 (or English Category or Elective)		4
	ENGL 4710 or 4720		4
	Khoury elective		4
	Elective		4
	0		16

Total Hours: 134

**English and Communication Studies, BA**

The English department and the communication studies department offer an interdisciplinary combined major in English and communication studies. Broadly speaking, students in the combined major in English and communication studies at Northeastern integrate the study of literature and writing with studies of media, social, corporate, and political communications.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
	or ENGL 1410 Introduction to Writing Studies	
<b>Diversity</b>		

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4

ENGL 2150	Literature and Digital Diversity
ENGL 2296	Early African-American Literature
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 4000	Topics in Early Literatures
ENGL 4020	Topics in 17th- and 18th-Century Literatures

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance
ENGL 3720	19th-Century Major Figure
ENGL 4040	Topics in 19th-Century Literatures
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Topics in Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Capstone**

ENGL 4710 or ENGL 4720	Capstone Seminar Capstone Project	4
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**English Electives**

Complete two additional ENGL electives. 8

**Communication Studies Requirements**

Code	Title	Hours
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**Communication Studies Common Requirements**

COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

**Foundation Course**

Complete one of the following: 4

COMM 1210	Persuasion and Rhetoric
COMM 1231	Principles of Organizational Communication
COMM 1225	Communication Theory
COMM 1255	Communication in a Digital Age

**Cluster Course**

Complete one of the following: 4

COMM 1131	Sex, Relationships, and Communication
COMM 2303	Global and Intercultural Communication
COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

**Writing-Intensive Courses**

Complete two of the following: 8

COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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 additional COMM courses. 12

**Integrative Requirement**

Code	Title	Hours
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**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

### Plan of Study

#### Sample Four Years, Two Co-ops

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ENGL 1000 or COMM 1000	1	Communication Studies foundational course	4	Communication Studies cluster course	4	Foreign Language	4	
ENGL 1400	4	English diversity course	4	Communication Studies elective	4	Communication Studies elective	4	
COMM 1101	4	English Pre-19th Century Literature elective	4					
COMM 1112 or 2301	4	ENGL 1160 or 1410	4					
Elective	4							
		17			16			8

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
English 19th-20th-21st Century Literature elective	4	CO-OP	4	CO-OP	4	Communication Studies writing-intensive	4	
English Theories and Methods course	4					Communication Studies elective	4	
Foreign Language	4							
Elective	4							
EEAM 2000	1							
		17			0			0
								8

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
English Comparative Literature elective	4	CO-OP	4	CO-OP	4	Elective	4
English Writing elective	4					Elective	4
Communication Studies writing-intensive	4						

Foreign Language	4			
		16	0	0
				8

##### Year 4

Fall	Hours	Spring	Hours
English elective	4	English capstone	4
English elective	4	Integrative COMM Course	4
Integrative ENGL course	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 130

### English and Criminal Justice, BA

The Department of English and School of Criminology and Criminal Justice offer a combined major in English and criminal justice. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. English courses prepare students to analyze and interpret various representations of crime, criminality, the law, justice, and ethics in both literary and nonliterary texts as they study the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures; analyze writing practices and related media; and practice a variety of approaches to the study of language, rhetoric, writing, and literature.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPATH Requirements

All undergraduate students are required to complete the NUPATH Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

### 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: 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 Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	

**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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Topics in Writing	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**English Electives**

Complete two additional ENGL electives. 8

**Criminal Justice Requirements**

Code	Title	Hours
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**Introduction to Crime, Law, and the Justice System**

What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.

CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.

Complete one of the following: 4

CRIM 1300	The Death Penalty
CRIM 1400	Human Trafficking
CRIM 1500	Corruption, Integrity, and Accountability
CRIM 1700	Crime, Media, and Politics

**Understanding and Experiencing Criminal Justice Institutions and Systems**

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government
CRIM 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

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4

**Crime Problems**

The following courses provide students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence
CRIM 3030	Global Criminology
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3540	Addiction and Recovery
CRIM 4630	Political Crime and Terrorism
CRIM 3070	Corporate and White-Collar Crime

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice

**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? Courses are project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

Complete one of the following: 4

CRIM 4040	Crime Prevention
CRIM 4120	Courts and Sentencing
CRIM 4300	Community-Based Corrections
CRIM 4500	Police Strategy

**Other Requirements**

Code	Title	Hours
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**Introduction to College**

Complete one of the following: 1

CRIM 1000	Criminal Justice at Northeastern	1
ENGL 1000	English at Northeastern	1

**Integrative Course**

Complete one of the following: 4

ENGL 1120	Trouble in Utopia
ENGL 3325	Rhetoric of Law
ENGL 3426	Literature and Politics

**Plan of Study**

**Sample Four Years, One Co-op Plan**

**Year 1**

Fall	Hours	Spring	Hours
CRIM 1000 or ENGL 1000	1	ENGL 1160 or 1410	4
ENGL 1111	4	CRIM 2100	4
CRIM 1100	4	CRIM 2200	4
ENGL 1400	4	Elective	4
Current crime and justice issues CRIM course	4		
		17	16

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Pre-19th- century ENGL	4	19th-, 20th-, or 21st- century ENGL	4	Elective	4	Elective	4
Systems and institutions CRIM course	4	Crime problems elective	4				
ENGL theory/ methods	4	Elective	4				

Elective	4	Elective	4
	16	16	4
			4
<b>Year 3</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
CRIM 3600	4	Co-op	Co-op
CRIM 3700	4		Elective
ENGL comparative literature	4		Elective
ENGL writing	4		
	16	0	0
			8
<b>Year 4</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Systemic issues CRIM elective	4	Solutions and reform course	4
ENGL elective	4	ENGL diversity	4
ENGL elective	4	Capstone	4
Elective	4	Elective	4
	16	16	

Total Hours: 129

## English and Cultural Anthropology, BA

The English department and the sociology/anthropology department offer an interdisciplinary combined major in English and cultural anthropology. Broadly speaking, students in the combined major in English and cultural anthropology at Northeastern integrate the study of literature, language, and writing with the study of human culture and its intersections with structures of inequality (e.g., race, class, and gender) and contemporary global issues.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		

Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	

ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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

**Cultural Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4

**Area Courses**

Additional 'area courses' taken may count as anthropology electives.

Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Capstone**

Students are expected to complete the following course in spring of their senior year:

ANTH 4600	Senior Seminar	4
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**Anthropology Electives**

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department. 12

**Integrative Requirements**

**Code Title Hours**  
 One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses.

**English Integrative Course**

ENGL 2450	Postcolonial Literature	4
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**Cultural Anthropology Integrative Courses**

Complete one of the following: 4

ANTH 2300	Reading Culture through Ethnography	
ANTH 3421	Foundations of Anthropological Theory	

**Cultural Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

## English and Cultural Anthropology Combined-Major Credit Requirement

Complete 88 semester hours in the major.

### Program Requirement

128 total semester hours required

### English and Graphic and Information Design, BA

The Department of English and the Department of Art + Design offer an interdisciplinary combined major in English and graphic and information design. Students interested in the combined major in English and graphic and information design integrate the study of literature and writing with the design of message and meaning, integrating text, image, and data.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	

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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

### Theories and Methods

Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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	
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**Comparative Literature**

Complete one of the following: 4

ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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

**Graphic and Information Design Requirements**

Code	Title	Hours
<b>Art and Design at Northeastern</b>		
ARTF 1000	Art and Design at Northeastern	1
or ENGL 1000	English at Northeastern	

**Art and Design Fundamentals**

ARTF 1122	Color and Composition (with optional ARTF 1123)	4
ARTF 2220	Movement and Time (with optional ARTF 2221)	4

**Art and Design History**

ARTH 2210	Modern Art and Design History	4
ARTH 2215	History of Graphic Design	4

**Design**

ARTG 1250	Design Process Context and Systems	4
ARTG 2250	Typography 1 (with optional ARTG 2251)	4
ARTG 2252	Graphic Design 1	4
ARTG 3350	Typography 2	4
ARTG 3451	Information Design 1	4

**Degree Project**

ARTG 4550	Design Degree Project 1	4
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**Art and Design Electives**

Complete one of the following: 4

ARTD 2360	Introduction to Photography (with optional ARTD 2361)	
ARTD 2380	Video Basics (with optional ARTD 2381)	
ARTG 2260	Programming Basics	
ARTF 1120	Observational Drawing	
ARTF 1121	Conceptual Drawing	
ARTF 1124	Form and Structure (with optional ARTF 1125)	
ARTF 2223	Experience and Interaction (with optional ARTF 2224)	
ARTG 2400	Interaction Design 1: Responsive (with optional ARTG 2401)	
ARTG 3351	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
<b>Integrative English Course</b>		
Complete one of the following: 4		
ENGL 2301	The Graphic Novel	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 3340	Technologies of Text	
ARTG 4551	Design Degree Project 2	

**Program Requirement**

128 total semester hours required



**Plan of Study****Sample Five Years, Two Co-ops (Summer 2/Fall)****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL 1000 or ARTF 1000	1	ENGL 1160 or 1410	4	Vacation		Vacation	
ENGL 1450	4	ARTG 1:	4				
ENGL 1450	4	ARTG 2250 (With optional ARTF 2251)	4				
ARTF 11 (with optional ARTF 2221)	4	Integrat course	4				
Elective	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ARTF 2220 (with optional ARTF 2221)	4	ARTH 2210	4	Vacation		Co-op	
ARTG 2:	4	ARTG 3:	4				
ENGL 1700	4	ENGL 19th-century requirement	4				
ENGL pre-19th century requirer	4	ENGL theories & method requirer	4				
	16		16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ARTG 3350	4	Vacation		Co-op	
		ARTH 2:	4				
		ENGL comparative requirement	4				
		ENGL diversity requirer	4				
	0		16		0		0

**Year 4**

Fall	Hours	Spring	Hours	Summer Full Semester	Hours
Co-op		ARTG 3451	4	Vacation	
		Elective	4		

ENGL 20th-century requirement 4

ENGL elective 4

0 16

0

**Year 5**

Fall	Hours	Spring	Hours
ARTG 4550	4	Integrative course	
ENGL 4:	4	English writing requiren	4
Elective	4	Elective	4
ENGL elective	4	Elective	4
	16		12

Total Hours: 125

**English and Philosophy, BA**

The Department of English and the Department of Philosophy and Religion offer an interdisciplinary combined major in English and philosophy. Students in the combined major in English and philosophy integrate the study of literature and writing with the study of ethical and philosophical issues and problems.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		

ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
ENGL 1400	Introduction to Literary Studies	4

**Diversity**

Complete one of the following courses. This course may also be used to fulfill an additional English requirement below: 4

ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	

**Pre-Nineteenth-Century Literature**

Complete one of the following: 4

ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literature to 1500	
ENGL 2240	17th-Century British Literature	
ENGL 2296	Early African-American Literature	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	

**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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	

ENGL 3380	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
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**Philosophy Requirements**

Code	Title	Hours
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**Philosophy Required Courses**

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Restricted Electives**

Take two of the following with at least one at the 4000 or 5000 level:	8
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PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3460	Philosophy and Literature	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Philosophy Electives**

Complete three additional electives from the philosophy department.	12
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**Integrative Requirement**

Code	Title	Hours
PHIL 3435	Moral Philosophy	4
ENGL 3619	Emerson and Thoreau	4

**English and Philosophy Combined Major Credit Requirement**

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1115	4	PHIL 2325	4	Vacation		Vacation	
ENGL 1000	1	ENGL 1160	4				
ENGL 1400	4	Elective	4				
Elective	4	ENGL Diversity Course	4				
Elective	4						
		17		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL Pre Nineteenth Century Literature Course		4 Co-op		Co-op		Elective	4
Elective	4					Elective	4
PHIL 2330	4					Elective	4
ENGL Nineteenth, Twentieth, and Twenty First Century Literature	4						
		16		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL Restricted Elective	4	Co-op		Co-op		Elective	4
Elective	4					Elective	4
ENGL Comparative Literature Course	4					Elective	4
ENGL Theories and Methods Course	4						
		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL Writing Course	4	Integrative Course	4	Elective	4		
ENGL Capstone	4	Elective	4	Elective	4		
PHIL Restricted Elective	4	Elective	4				
Elective	4	Elective	4				
		16		16		8	

Total Hours: 129

## English and Political Science, BA

The Department of English and the Department of Political Science offer an interdisciplinary combined major in English and political science. Students in the combined major in English and political science integrate the study of literature and writing with the study of political issues and problems.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### English Requirements

Code	Title	Hours
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	

### English Electives

Two of the courses chosen from the lists below must be at the 3000 or 4000 level.

Code	Title	Hours
<b>Diversity</b>		
Complete one of the following. You may reuse this course to fulfil an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3685	Modern and Contemporary Jewish Literature	
<b>Pre-19th-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literature to 1500	
ENGL 2240	17th-Century British Literature	
ENGL 2296	Early African-American Literature	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>19th-, 20th-, 21st-Century Literature</b>		
Complete one of the following:		4
<i>19th Century</i>		
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
<i>20th/21st Century</i>		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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	
<b>Comparative Literature Course</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Topics in Writing	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	

**English Electives**

Complete two English courses not used above. 8

**Political Science Requirements**

Code	Title	Hours
<b>Foundational Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political Thought**

Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete three courses in the following range:		12
POLS 2300 and above that are not fulfilling other POLS requirements		

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- Campaigns and Elections (p. 875)
- Comparative Politics (p. 875)
- Identity, Culture, and Politics (p. 875)
- International Relations and Diplomacy (p. 875)
- Law and Legal Studies (p. 875)
- Public Policy (p. 875)
- Security Studies (p. 875)

**Supporting Courses for Political Science**

Code	Title	Hours
Complete one of the following to fulfill the prerequisite for POLS2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Integrative Requirements**

Code	Title	Hours
<b>English Integrative Requirement</b>		
Complete one of the following:		4
ENGL 2740	Writing and Community Engagement	
ENGL 3426	Literature and Politics	

**Political Science Integrative Requirement**

Complete one of the following:		4
POLS 2368	Music and Politics in America and Abroad	
POLS 3320	Politics and Mass Media	

**Capstone**

Complete one of the following:		4
ENGL 4710	Capstone Seminar	
POLS 4701	Political Science Senior Capstone	
or POLS 4703	Senior Thesis	

**Major Credit Requirement**

88 semester hours required in the major

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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
<b>Theoretical Requirement</b>		
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	



POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

### Plan of Study

#### Sample Five Years, Two Co-ops in Summer 2/Fall

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENGL 1000	1	ENGL 1160 or 1410	4	Vacation		Vacation
ENGL 11	4	POLS 11	4			
POLS 1150	4	POLS 2400	4			
		prerequisite				
POLS 11	4	English elective	4			
Elective	4					
		17	16	0	0	

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENGL pre-19th-century requirement	4	ENGL 19th-, 20th-, 21st-century requirement	4	Vacation		Co-op
ENGL elective	4	ENGL theories and method requirem	4			
POLS elective	4	Elective	4			
POLS thought course	4	POLS 21	4			
		16	16	0	0	

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		ENGL comparative literature requirement	4	Vacation		Co-op
		ENGL diversity requirem	4			
		Elective	4			
		POLS 21	4			
		0	16	0	0	

Year 4						
Fall	Hours	Spring	Hours	Summer	Hours	Full Semester
Co-op		Elective	4	Vacation		

ENGL elective	4	
POLS elective	4	
		0 12 0

Year 5			
Fall	Hours	Spring	Hours
Capstone	4	Integrative course	4
Elective	4	English writing requirem	4
POLS elective	4	Elective	4
POLS integrat course	4	Elective	4
		16	16

Total Hours: 125

### English and Theatre, BA

The Department of Theatre and Department of English offer an interdisciplinary combined major that integrates performance, design, production, and dramatic literature with literary studies, digital humanities, and creative writing. This combined major offers both classroom and experiential learning in making theatre, playwriting, and dramaturgy with the study of the diverse historical, cultural, and aesthetic contexts of literature. Students develop the capacity for interpreting a variety of texts through performance and writing to engage audiences.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

#### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

#### English Requirements

Code	Title	Hours
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##### English Course-Level Requirement

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	

**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 Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Topics in Writing	

ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer's Marketplace	
<b>Capstone</b>		
ENGL 4710 or ENGL 4720	Capstone Seminar Capstone Project	4
<b>English Electives</b>		
Complete two additional ENGL electives.		8

## Theatre Requirements

A minimum grade of C is required in all theatre courses.

Code	Title	Hours
<b>Foundational Stages</b>		
THTR 1000 or ENGL 1000	Theatre at Northeastern English 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
<b>Theatre Texts and Context</b>		
Complete one of the following:		4
THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	
<b>Making Theatre</b>		
THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4
<b>Intermediate or Advanced Technique</b>		
Complete two of the following:		8
THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	
THTR 2380	Costume Design	
THTR 2400	Scenic Design	
THTR 3200	Queer Theatre and Performance	
THTR 3300	Devised Theatre Project: Collaborative Performance	
THTR 3400	Designing Combat for the Stage	
THTR 3450	Acting 3—Playing Shakespeare	
THTR 3550	Directing for the Stage	
THTR 3570	Musical Theatre Performance 2	
THTR 3100	Creative Storytelling for Social Engagement	

## Integrative Requirements

Courses used in the integrative requirements cannot double-count in other areas of the major.

Code	Title	Hours
<b>Integrative Courses</b>		
ENGL 1600	Introduction to Shakespeare	4
THTR 2315 or THTR 2320	Rebels of Modern Drama Classics of 20th-Century American Drama	4

## English and Theatre Major Credit Requirement

90 semester hours required in the major

## Program Requirement

128 total semester hours required

## Plan of Study

### Sample Four Years, One Co-op

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
THTR 1000 or ENGL 1000	1	THTR 1131	4	Elective		4	Vacation
THTR 1100	1	ENGL 1160 or 1410	4	Elective		4	
THTR 1101	4	THTR 1270	4				
THTR 1120	4	ENGL elective	4				
ENGL 1400	4						
ENGL comparative requirement	4						
		18		16		8	
						0	

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL 1600	4	Co-op		Co-op		Vacation	
THTR 2000	1						
THTR 2325	4						
THTR 2315 or 2320	4						
ENGL pre-19th- century requirement	4						
EEAM 2000	1						
		18		0		0	
						0	

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL 19th-, 20th-, or 21st-Century requirement	4	Foreign Language		4	Foreign Language	4	Vacation
ENGL Theories & Methods requirement	4	ENGL diversity requirement		4	Elective	4	
THTR Intermediate or Advanced Technique elective	4	THTR Intermediate or Advanced Technique		4			

THTR Text and Context elective	4	Elective	4
	16		16
			8
			0
<b>Year 4</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
ENGL writing requirement	4	THTR 4702	4
ENGL elective	4	Foreign Language	4
Elective	4	ENGL Capstone	4
Elective	4	Elective	4
	16		16

Total Hours: 132

## History and English, BA

The English department and the history department offer an interdisciplinary combined major in English and history. Students interested in the combined major in English and history integrate the study of literature and writing with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from the 1000 level.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1

<b>Pre-1800 History Elective</b>	
Complete one of the following: 4	
HIST 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 1185	Introduction to Middle Eastern History
HIST 2370	Renaissance to Enlightenment
HIST 1285	Introduction to Russian Civilization
HIST 2330	Colonial and Revolutionary America

<b>Intermediate/Advanced History Courses</b>	
Complete four history courses numbered 2000 or above that have not been used to fulfill another requirement.	16

<b>Advanced History</b>	
Complete one history course at the 3000 level or above that has not been used to fulfill another requirement.	4

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literature to 1500	
ENGL 2296	Early African-American Literature	
ENGL 2240	17th-Century British Literature	

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 4000	Topics in Early Literatures
ENGL 4020	Topics in 17th- and 18th-Century Literatures
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>	
Complete one of the following: 4	
ENGL 2301	The Graphic Novel
ENGL 2330	The American Renaissance
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3720	19th-Century Major Figure
ENGL 3730	20th- and 21st-Century Major Figure
ENGL 4040	Topics in 19th-Century Literatures

**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 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 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers

ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4	
ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Topics in Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**English Electives**

Complete two additional ENGL electives.	8
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**Capstone**

Code	Title	Hours
Complete one of the following: 4		
ENGL 4710	Capstone Seminar	
ENGL 4720	Capstone Project	
HIST 4701	Capstone Seminar	
Public History:		
HIST 4903	Fieldwork in History 1	

**Integrative Requirement**

Code	Title	Hours
<b>Required Integrative Course</b>		
ENGL 4400	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	1	HIST elective or integrative 1	4	Vacation		Vacation	
HIST 1200	1	HIST elective or integrative 2	4				
HIST 1201	4	ENGL 1160 or 1410	4				
ENGW 1111	4	Elective	4				
ENGL 1400	4						
Elective	4						
		18	16		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST elective or integrative 3	4	Vacation		Co-op	
HIST 2302	1	HIST elective or integrative 4	4				
Pre-19th-century ENGL	4	19th-, 20th-, or 21st-century ENGL	4				
ENGL theory/methods	4	Elective	4				
Elective	4						
		17	16		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 5	4	Elective	4	Co-op	
		ENGL comparative	4	Elective	4		
		ENGL writing	4				
		Elective	4				
		0	16		8		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 6	4	Elective	4	Co-op	
		ENGL diversity	4	Elective	4		
		Elective	4				
		Elective	4				
		0	16		8		0

Year 5			
Fall	Hours	Spring	Hours
Co-op		HIST capstone or HIST senior project or ENGL capstone	4
		HIST elective or integrative 7	4
		Elective	4
		Elective	4
		0	16

Total Hours: 131

## Journalism and English, BA

The School of Journalism and the English Department offer an interdisciplinary combined major in Journalism and English. Broadly speaking, students in the Combined Major in Journalism and English at Northeastern integrate the study of journalism with the study of language, literature and writing.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Creative Expression/Innovation (EI), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUpath requirements Interpreting Culture (IC), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.



**Journalism Major Requirements**

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Law and Ethics</b>		
JRNL 3550 or JRNL 4650	The First Amendment and the Media Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses		12

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Writing Studies	4
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	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

**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 Four Years, Two Co-ops**

**SPRING/SUMMER 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 1000 or ENGL 1000	1	JRNL 2201	4	Foreign language	4	Foreign language	4
JRNL 1101 and JRNL 1102	5	ENGL 1160 or 1410	4	Elective	4	Elective	4
JRNL 1150	4	English diversity requirement	4				

ENGW 1111	4	Pre-nineteenth-century literature requirement	4
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ENGL 1400	4						
	18		16		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3630	4	Co-op	0	Co-op	0	Elective	4
EEAM 2000 or EESH 2000	1					Elective	4

Nineteenth-century, twentieth-, and twenty-first-century literature requirement	4						
Theories and methods requirement	4						
Elective	4						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 2301	4	Co-op	0	Co-op	0	English elective 1	4
Journalism elective 1	4					Elective	4

Comparative literature requirement	4						
English writing requirement	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
JRNL 3610	4	JRNL 3550 or 4650	4				
Journalism elective 2	4	Journalism elective 3	4				
ENGL 2740 or 2850	4	ENGL 4710	4				
English elective 2	4	Elective	4				
	16		16			0	

Total Hours: 131

**Linguistics and English, BA**

In the combined major in linguistics and English, students learn about the structures and analysis of human languages across multiple levels (sounds, words, phrases and sentences, meaning) and apply this knowledge to understanding how the English language works, its rhetorical forms, how it has changed over time, and its cultural context.

Students hone their writing skills, develop substantial language-analysis skills, and apply them particularly to English.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Linguistics Requirements

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4
LING 2350	Linguistic Analysis	4
LING 3412	Language and Culture	4
LING 3442	Sociolinguistics	4
<b>Linguistic Structure</b>		
Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	
<b>Linguistics Electives</b>		
Complete two courses (not used elsewhere) from the following:		8
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3456	Language and Gender	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4891	Research Seminar in Linguistics	
or LING 4970	Junior/Senior Honors Project 1	

or LING 4971	Junior/Senior Honors Project 2
or LING 4991	Directed Study Research
LING 4993	Independent Study
PHIL 1115	Introduction to Logic
PSYC 3464	Psychology of Language
PSYC 3466	Cognition
PSYC 4520	Language and the Brain
PSYC 4522	Psychology of Reading
PSYC 4524	Cognitive Development
PSYC 4610	Laboratory in Psycholinguistics
PSYC 4612	Laboratory in Cognition
PSYC 4658	Seminar in Psycholinguistics
PSYC 4660	Seminar in Cognition
PSYC 4674	Seminar in Cognitive Neuroscience

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
At least two of the courses chosen from the English Requirements lists below must be numbered 3000–4999.		
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses:		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 Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		

Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3619	Emerson and Thoreau	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

**Theories and Methods**

Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 4400	Opening the Archive	
ENGL 4410	Research in Rhetoric and Writing	

**Comparative Literature**

Complete one of the following:		4
ENGL 1120	Trouble in Utopia	
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	

ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Topics in Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**Electives**

Complete one additional ENGL elective at the 2000 level or higher.	4
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**Linguistics/English Combined-Major Requirements**

Code	Title	Hours
<b>Integrative Course</b>		
LING 3454	History of English	4
<b>Junior/Senior Seminar</b>		
ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	
or LING 4654	Seminar in Linguistics	
<b>Experiential Learning</b>		
Complete one of the following options. Courses used to satisfy this requirement may simultaneously satisfy a requirement above.		0-8
Study Abroad (not a Dialogue)		
International Co-op		
LING 4891	Research Seminar in Linguistics	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	
LING 4991	Directed Study Research	

**Linguistics/English Combined Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation	0	Vacation	0
ENGW 1111	4	ENGL 1400	4				
MATH 1215	4	Foreign language core course	4				
Elective	4	Elective	4				
		16			16		
					0		
						0	

## Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 3454	4	Linguistic structure course	4	Vacation	0	Co-op	0
Linguistics elective	4	LING 3412 or 3442	4				
ENGL 1410 or 1160	4	Theories and methods course	4				
Foreign language core course	4	Diversity course	4				
		EESC 2000	1				
	16		17		0		0

## Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Linguistic structure course	4	Elective	4	Co-op	0
		Pre-19th century literature course	4	Elective	4		
		Comparative literature course	4				
		ENGW 3315	4				
	0		16		8		0

## Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	LING 3412 or 3442	4	Elective	4	Co-op	0
		Linguistics structure course	4	Elective	4		
		Writing course	4				
		19th-, 20th-, and 21st-century literature course	4				
	0		16		8		0

## Year 5

Fall	Hours	Spring	Hours
Co-op	0	Linguistics elective	4
		Junior/senior seminar	4
		Foreign language core course	4
		English elective	4
	0		16

Total Hours: 129

## Media and Screen Studies and English, BA

The media and screen studies program and the Department of English offer a combined major in media and screen studies and English. The combined major integrates the analysis, research, and production of traditional and emerging media along with the study of the diverse historical, cultural, and aesthetic contexts of English, American, and other Anglophone literatures. Majors become familiar with writing practices and media from the Middle Ages through the present, from the quill pen to computer code.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

## Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	

**Writing-Intensive**

Complete two of the following:	8
MSCR 2505	Digital Feminisms
MSCR 3600	Film Theory
MSCR 3420	Digital Media Culture
MSCR 3422	Media Audiences
MSCR 4208	TV History

**Media and Screen Studies Electives**

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

**English Requirements**

Code	Title	Hours
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**English Course-Level Requirement**

In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.

**Introduction to College**

ENGL 1000	English at Northeastern	1
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**Foundational Courses**

ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to 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 Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 4000	Topics in Early Literatures
ENGL 4020	Topics in 17th- and 18th-Century Literatures

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following:	4
ENGL 2330	The American Renaissance
ENGL 3720	19th-Century Major Figure
ENGL 4040	Topics in 19th-Century Literatures
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following:	4
ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race



ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	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

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
MSCR 3600	Film Theory	4
ENGL 1450	Reading and Writing in the Digital Age	4
or ENGL 3340	Technologies of Text	

**Media and Screen Studies Grade Requirement**

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000 or ENGL 1000	1	MSCR 1320 or 1420	4	MSCR elective	4	Elective	4

MSCR 1220	4	MSCR foundation	4	Foreign Language	4	Elective	4
ENGL 1400	4	ENGL pre-19th-century literature elective	4				
ENGL 1160 or 1410	4	Foreign Language	4				
Foreign Language	4						
		17			16		
					8		
						8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR elective	4	Co-op		Co-op		Elective	4
ENGL 19th-, 20th-, and 21st-century literature elective	4					Elective	4
ENGL diversity elective	4						
MSCR diversity/globalization	4						
EEAM 2000	1						
		17			0		
					0		
						8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL theories and methods elective	4	MSCR elective	4	Elective	4	Co-op	4
ENGL elective	4	ENGL comparative elective	4	Elective	4		4
MSCR writing-intensive	4	MSCR writing-intensive	4				
ENGL elective	4	ENGL 1450 or 3340	4				
		16			16		
					8		
						0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 2	Hours	
Co-op		ENGL writing elective	4			
		MSCR 3600	4			
		ENGL 4710 or 4720	4			
		Elective	4			
		0			16	
						0

Total Hours: 130

## Architecture and English, BS

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath attributes Natural and Designed World (ND), Creative Expression and Innovation (EI), Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

In order to graduate, students must complete Formal and Quantitative Reasoning (FQ), Analyzing and Using Data (AD), and Ethical Reasoning (ER) in their electives.

### Architecture Requirements

Code	Title	Hours
<b>Required Courses</b>		
ARCH 1110	Fundamental Architectural Representation	4
ARCH 1120	Fundamental Architectural Design	6
ARCH 1310	Buildings and Cities, A Global History	4
ARCH 1320	Architecture and Global Cultures, 1400 to Present	4
ARCH 1450	Understanding Design	4
ARCH 2130	Site, Space, and Program	6
ARCH 2240	Architectonic Systems	4
ARCH 2330	Architecture and the City in the Nineteenth Century	4

### Electives

Complete two of the following courses:		8
ARCH 3370	Advanced Topics in Architectural History	
ARCH 3450	Advanced Architectural Communication	
ARCH 5310	Design Tactics and Operations	

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
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: 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 Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	

### Nineteenth-, Twentieth-, and Twenty-First-Century Literature

Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	

### Theories and Methods

Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	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

**Integrative Requirement**

Code	Title	Hours
ARCH 2330	Architecture and the City in the Nineteenth Century	4
or ARCH 2340	Modern Architecture	
ENGL 3375	Writing Boston	4

**Program Requirement**

128 total semester hours required

**Biology and English, BS**

In the 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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Biology Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000	Biology at Northeastern	1
or ENGL 1000	English at Northeastern	

**Experiential Learning Introduction**

EESC 2000	Professional Development for Co-op	1
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**Required Biology**

<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5

**Biology Elective**

Code	Title	Hours
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

**Supporting Courses for Biology**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
<b>Statistics</b>		
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	5
<b>Chemistry</b>		
<i>General Chemistry</i>		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
<i>Organic Chemistry</i>		
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5

CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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**Physics**

<i>Physics 1</i>		
Complete one of the following lecture/lab pairs. PHYS 1145/ PHYS 1146 is recommended:		5
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	

*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	

**English Requirements**

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160 or ENGL 1410	Introduction to Rhetoric Introduction to Writing Studies	4
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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
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ENGL 1600	Introduction to Shakespeare
ENGL 1700	Global Literature to 1500
ENGL 2240	17th-Century British Literature
ENGL 2296	Early African-American Literature
ENGL/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 4000	Topics in Early Literatures
ENGL 4020	Topics in 17th- and 18th-Century Literatures

**Nineteenth-, Twentieth-, and Twenty-First-Century Literature**

Complete one of the following: 4

ENGL 2330	The American Renaissance
ENGL 3720	19th-Century Major Figure
ENGL 4040	Topics in 19th-Century Literatures
ENGL 2301	The Graphic Novel
ENGL 2440	The Modern Bestseller
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

**Theories and Methods**

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age
ENGL 1502	American Literature to 1865
ENGL 1503	American Literature 1865 to Present
ENGL 2150	Literature and Digital Diversity
ENGL 2380	The Modern Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2450	Postcolonial Literature

ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Topics in Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**English Electives**

Complete two additional ENGL electives. 8

**Integrative Courses**

Code	Title	Hours
<b>Integrative English Course</b>		
Complete one of the following: 4		
ENGL 2770	Writing to Heal	
ENGL 3340	Technologies of Text	

**Integrative General Biological Sciences Course**

Complete one of the following: 4		
PSYC 3464	Psychology of Language	
PSYC 4520	Language and the Brain	
SOCL 3485	Environment, Technology, and Society	

**Capstone Requirement**

Complete one of the following capstone options:

Code	Title	Hours
<b>Biology Capstone</b>		
BIOL 4701	Biology Capstone	4
<b>English Capstone</b>		
ENGL 4710	Capstone Seminar	4
or ENGL 4720	Capstone Project	

## Biology and English Combined Major GPA Requirement

Minimum 2.000 GPA required in all BIOL courses  
Minimum 2.000 GPA required in all ENGL courses

## Program Requirement

128 total semester hours required

### English, Minor

The English minor offers students the opportunity to complement their major area with focused course work in any of the broad areas of English studies, such as writing practices, language, rhetoric, and literature.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Three of the four total courses must be taken at Northeastern.

*Note:* Courses taken to fulfill the first-year writing requirement and the Advanced Writing in the Disciplines requirements do not count toward this minor. A total of 16 semester hours is required for the English minor.

## Requirements

Code	Title	Hours
<b>Introductory Course</b>		
Complete one course in the following range:		4
ENGL 1001 to ENGL 1999		
<b>Electives</b>		
Complete three ENGL courses, two of which must be in the range ENGL 2000 to ENGL 4999.		12

## GPA Requirement

2.000 GPA required in the minor

### Rhetoric, Minor

The rhetoric minor appeals to students interested in history, theory, and the criticism of civic discourse and cultural practices. The minor integrates courses from the Department of Communication Studies and the Department of English that explore the nature and function of rhetoric in politics, the professions, and the media. The rhetoric minor offers students an opportunity to be better citizens, members of the community, and leaders in the workplace by learning how to use language strategically, to speak with integrity, and to appreciate the power of their own voice.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where indicated.

Students must complete a minimum of three courses exclusive to this minor beyond the courses required for the student's declared major(s) and additional minor(s).

## Foundational Course

Code	Title	Hours
Complete one of the following:		
COMM 1210	Persuasion and Rhetoric	4
ENGL 1160	Introduction to Rhetoric	

## Electives

Code	Title	Hours
Note: For English majors, only one course from the major may also count toward this elective section of the minor.		
Complete four of the following:		16
COMM 1331	Legal Argumentation, Advocacy, and Citizenship	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3501	Free Speech: Law and Practice	
COMM 4602	Contemporary Rhetorical Theory	
ENGL 3325	Rhetoric of Law	
ENGL 3381	The Practice and Theory of Teaching Writing	

## 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:		
ENGL 1160	Introduction to Rhetoric	4
ENGL 1410	Introduction to Writing Studies	
ENGL 3325	Rhetoric of Law	
ENGL 3381	The Practice and Theory of Teaching 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 2695	Travel and Place-Based Writing	
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	



ENGL 3325	Rhetoric of Law
ENGL 3340	Technologies of Text
ENGL 3370	Writing Cultures
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Topics in Writing
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3382	Publishing in the 21st Century
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/>)

#### Timothy Brown, PhD

Professor and Chair

249 Meserve Hall  
617.373.2660  
617.373.2661 (fax)

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. 27)."

### 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 (<https://registrar.northeastern.edu/article/combined-majors/>), 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. 30)." For template program requirements, visit the myNortheastern web portal (<https://my.northeastern.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 Graduate Program Director as soon as they think they might be interested in pursuing the Master's degree.

### Programs

#### Bachelor of Arts (BA)

- History (p. 895)
- History and Asian Studies (p. 768)
- History and Criminal Justice (p. 773)
- History and Cultural Anthropology (p. 901)
- History and Economics (p. 826)
- History and English (p. 879)
- History and Philosophy (p. 907)
- History and Political Science (p. 908)
- History and Religious Studies (p. 911)
- Environmental Studies and History (p. 641)

- International Affairs and History (p. 913)
- Media and Screen Studies and History (p. 157)

**Bachelor of Science (BS)**

- History (p. 918)
- Computer Science and History (p. 351)
- History and Economics (p. 846)

**Minor**

- History (p. 925)

**Accelerated Programs**

See Accelerated Bachelor/Graduate Degree Programs (p. )

**History, BA**

The Bachelor of Arts (BA) is a broadly based liberal arts degree in history. Students who pursue the BA degree must satisfy general requirements and take courses to satisfy Northeastern's university-wide core curriculum (NUpath (p. 42)), 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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**History Major Requirements**

Code	Title	Hours
<b>Introductory History</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
Complete two of the following:		8
HIST 1100	Law and History	
HIST 1120	Public History, Public Memory	

HIST 1130	Introduction to the History of the United States
HIST 1150	East Asian Studies
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1180	African History
HIST 1185	Introduction to Middle Eastern History
HIST 1187	Introduction to Latin American History
HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues
HIST 1246	World War II in the Pacific
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies

**History Seminar and Historical Writing**

HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5
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**Additional History Requirements**

Code	Title	Hours
<b>Pre-1800 Course</b>		
Complete one of the following:		4
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 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	
HIST 2390	Africa and the World in Early Times	

**History Outside the United States and Europe**

Complete one of the following:		4
HIST 1150	East Asian Studies	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1290	Modern Middle East	
HIST 1500	Modern Chinese History and Culture	
HIST 2211	The World Since 1945	
HIST 2214	War in the Modern World	
HIST 2311	Colonialism/Imperialism	
HIST 2351	Modern Japan	
HIST 2390	Africa and the World in Early Times	

**Capstone or Project**

Complete one of the following: 4

HIST 4701	Capstone Seminar	
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**Intermediate/Advanced History Course Requirement**

Code	Title	Hours
	Complete four history courses numbered 2000 or above (excluding HIST 2301 and HIST 2302); one of these courses must be numbered 3000–4999.	16

**History Major Credit Requirement**

Complete 46 semester hours in the major.

**Program Requirements**

128 total semester hours required

**Plan of Study**

**Four Years, One Co-Op**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1000	1	HIST 1130	4	Vacation	0	Vacation	0
HIST 1170	4	MATH 1215	4				
ENGW 1111	4	Elective	4				
Elective	4	Elective	4				
HIST 1200	1						
HIST 1201	4						
		18		16		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course	4	Foreign language course	4	Elective	4	Co-op	0
Elective	4	Intermediate/Advanced History Elective	4	Elective	4		
Pre-1800 or non-U.S./Europe history course	4	Pre-1800 or non-U.S./Europe History Course	4				
Elective	4	Elective	4				
		16		16		8	

Year 3					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op	0	Foreign language course	4	Elective	4
		HIST 2301	4	Elective	4
		HIST 2302	1		
		Elective	4		
		Intermediate/Advanced History Elective	4		
		0		17	

Year 4			
Fall	Hours	Spring	Hours
Intermediate/Advanced History Elective	4	Intermediate/Advanced History Elective	4
Elective	4	HIST 4701	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	

Total Hours: 131

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1170	4	HIST 1130	4	Vacation	0	Vacation	0
ENGW 1111	4	MATH 1215	4				
Elective	4	Foreign language course	4				
HIST 1200	1	Elective	4				
HIST 1201	4						
		17		16		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course	4	Co-op	0	Co-op	0	Elective	4
Pre-1800 or non-U.S./Europe History Course	4					Elective	4
Intermediate/Advanced History Elective	4						
Elective	4						
		16		0		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course	4	Co-op	0	Co-op	0	Elective	4
Pre-1800 or non-U.S./Europe History Course	4					Elective	4
Intermediate/Advanced History Elective	4						
Elective	4						
		16		0		0	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Vacation	0

HIST 2301	4			
HIST 2302	1			
Elective	4			
Intermediate/ Advanced History Elective	4			
	17	0	0	0

Year 5				
Fall	Hours	Spring	Hours	
Elective	4	HIST 4701	4	
Intermediate/ Advanced History Elective	4	Elective	4	
Elective	4	Elective	4	
Elective	4	Elective	4	
	16		16	

Total Hours: 130

## Environmental Studies and History, BA

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, and political aspects of the world's environmental problems through historical perspectives and backgrounds.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Environmental Studies Requirements

Code	Title	Hours
<b>Science Requirements</b>		
ENVR 1101	Environmental Science	4
ENVR 1202 and ENVR 1203	History of Earth and Life and Interpreting Earth History	5
ENVR 1110	Global Climate Change	4

### Humanities Requirement

PHIL 1180	Environmental Ethics	4
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### 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 Requirements

ECON 3423	Environmental Economics	4
POLS 2395	Environmental Politics and Policy	4

### History Requirements

Code	Title	Hours
<b>History Requirements</b>		
HIST 1130	Introduction to the History of the United States	4
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	4
HIST 1201	First-Year Seminar	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4

### History Seminar

HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5
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### History/Geographic-Area Electives

Complete two of the following:		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 adviser, focused on an idea or geographic area. These courses must be numbered 2000 or higher.		16
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### Integrative Courses

Code	Title	Hours
<b>Required Integrative Course</b>		
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	5
<b>Integrated Elective</b>		
ENVR 5210	Environmental Planning	4

### Experiential Learning and Capstone

Code	Title	Hours
<b>Experiential Learning</b>		
Complete an approved activity from either department, combined with reflection in capstone.		
<b>Capstone Course</b>		
Complete one of the following:		1-4
ENVR 4997 or ENVS 4997	Senior Thesis	
ENVR 4900	Earth and Environmental Science Capstone	
ENVR 4970	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 and ENVR 1203	5	Vacation	0	Vacation	0
ENVR 1000	1	HIST 1170	4				
ENVR 1101	4	HIST 1201	4				
HIST 1130	4	PHIL 1180	4				
SOCL 1246	4						
	17		17		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1116	4	EESC 2000	1	Vacation	0	Co-op	0
Foreign language course	4	Elective	4				
HIST 1215	4	ENVR 1110	4				
History elective	4	Foreign language course	4				
		HIST geographic elective	4				
	16		17		0		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENVR 3300 and ENVR 3301	5	Elective	4	Co-op	0
		POLS 1150 and POLS 1151	4	Elective	4		
		Foreign language course	4				
		ENVR undergraduat elective	4				
	0		17		8		0

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3308 or 3315	4	Elective	4	Co-op	0
		HIST 2301 and HIST 2302	5	Elective	4		
		History elective	4				

History elective	4		
	0	17	8
			0

#### Year 5

Fall	Hours	Spring	Hours
Co-op	0	Capstone course	1-3
		ENVR undergraduat elective	4
		HIST geographic elective	4
		Integrative major requirement	4
		History elective	4
	0		17-19

Total Hours: 134-136

## History and Asian Studies, BA

History and Asian studies offers an interdisciplinary combined major. Students interested in the combined major in history and Asian studies integrate the exploration of human history with the rigorous study of Asian cultures, societies, languages, and economies.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4

## Introductory Level

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 the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 1270	Ancient Greece	
HIST 2370	Renaissance to Enlightenment	
HIST 1185	Introduction to Middle Eastern History	
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 4

**History Cluster**

In conjunction with your history advisor, define a history cluster by the first semester of your junior year of study. A cluster comprises four history courses with no more than two courses in the 1200–1299 range. These courses may double-count in the requirements above (except History Colloquium).

**Asian Studies Requirements**

Code	Title	Hours
<b>Required Courses</b>		
ASNS 1150	East Asian Studies	4
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	4

**Asia in Global Context**

Complete one of the following: 4

ECON 3290	History of the Global Economy	
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
<b>Language Courses</b>		

Complete the following courses in either Chinese or Japanese: 16

*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 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 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
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	

**Integrative Requirement**

Note: Public history concentrators satisfy this requirement within the concentration with Fieldwork in History 1 (HIST 4903).

Code	Title	Hours
HIST 2351	Modern Japan	4
or ASNS 2245	The Asian-American Experience	

**History and Asian Studies Major Credit Requirement**

Complete 82 semester hours in the major.



## Program Requirements

128 total semester hours required

### History and Criminal Justice, BA

This combined major educates students in criminal justice and history, emphasizing the complementarity between these two disciplines. Students successfully completing this program will be able to critically evaluate and draw connections between past and present practices in law, punishment, incarceration, justice, and the social institutions and cultural contexts in which these systems operate.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one other course from HIST 1001 to HIST 1999 (excluding HIST 1100, HIST 1200, and HIST 1201).		4
<b>Intermediate/Advanced Level</b>		
Complete four HIST courses numbered 2000 or above (excluding HIST 2301 and HIST 2302).		16
<b>Advanced Level</b>		
Complete one HIST course numbered 3000 or above.		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	

HIST 2330	Colonial and Revolutionary America
HIST 2370	Renaissance to Enlightenment

## Criminal Justice Requirements

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses successful students will develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
<b>Current Crime and Justice Issues</b>		
These courses introduce students to topical issues related to crime and justice.		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Understanding and Experiencing Criminal Justice Institutions and Systems</b>		
How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.		
Complete one of the following:		4
CRIM 2310	Courts: The Third Branch of Government	
CRIM 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	
<b>Creating Knowledge about Crime and Justice</b>		
How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.		
CRIM 3700	Analyzing and Using Data on Crime and Justice	4
<b>Crime Problems</b>		
The following courses offer students a deeper look at a range of crime problems.		
Complete one of the following:		4
CRIM 3010	Criminal Violence	
CRIM 3030	Global Criminology	
CRIM 3040	Psychology of Crime	
CRIM 3050	Organized Crime	
CRIM 3540	Addiction and Recovery	
CRIM 4630	Political Crime and Terrorism	
CRIM 3070	Corporate and White-Collar Crime	
<b>Systemic Issues</b>		

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice

**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? Courses are project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

Complete one of the following: 4

CRIM 4040	Crime Prevention
CRIM 4120	Courts and Sentencing
CRIM 4300	Community-Based Corrections
CRIM 4500	Police Strategy

**Other Requirements**

Code	Title	Hours
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A minimum of one history course must be taken between the methods and capstone requirements.

**Methods**

Complete one of the following: 4

CRIM 3600	Criminal Justice Research Methods
HIST 2301	The History Seminar

**Capstone**

Complete one of the following: 4

HIST 4701	Capstone Seminar
CRIM 4949	Senior Capstone Seminar

**Integrative Course**

HIST 1100	Law and History	4
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**Program Requirements**

128 total semester hours required

**Plan of Study**

**Example plan of study with One Co-op**

**Year 1**

Fall	Hours	Spring	Hours
HIST 1200	1	HIST 1100	4
HIST 1201	4	CRIM 2100	4
CRIM 1100	4	CRIM 2200	4
Current crime and justice issues CRIM course	4	Introductory-level history course	4
ENGW 1111	4		
		17                  16	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours
Systems and institutions CRIM course	4	Intermediate/advanced history elective	4	Elective	4
Pre-1800 history elective	4	Methods course	4	Elective	4

Intermediate history elective	4	Elective	4
Elective	4	Elective	4
		16                  16                  8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
CRIM 3700	4	Co-op		Co-op		Elective	4	
Crime problems elective	4							
Intermediate/advanced history elective	4							
Elective	4							
EESH 2000	1							
		17		0		0		4

**Year 4**

Fall	Hours	Spring	Hours		
Systemic issues CRIM elective	4	Solutions and reform CRIM course	4		
Intermediate/advanced history elective	4	Capstone	4		
Advanced history course	4	Elective	4		
Elective	4	Elective	4		
CRIM 3000	1	Elective	1		
		17		17	

Total Hours: 128

**History and Cultural Anthropology, BA**

History and cultural anthropology offer an interdisciplinary combined major. Students interested in the combined major in history and cultural anthropology integrate the exploration of human history with the rigorous study of human cultures.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one course from the following:		4
HIST 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	
<b>Intermediate/Advanced History Cluster</b>		
Complete three history courses numbered 2303 or above.		12
<b>Advanced History</b>		
Complete one history course at the 3000 level or above.		4
<b>Cultural Anthropology Requirements</b>		
Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
<b>Area Courses</b>		
Complete two courses from the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
<b>Anthropology Electives</b>		
Complete three courses in the following range. One study-abroad course may count toward this requirement.		12
ANTH 2001 to ANTH 4599		

## Capstone Requirements

Code	Title	Hours
Complete one of the following:		
ANTH 4600	Senior Seminar	4
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 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
HIST 1000	1	HIST elective or integrative 1	4	Vacation		Vacation
HIST 1200	1	HIST elective or integrative 2	4			
HIST 1201	4	ANTH 2305	4			
ENGW 1111	4	Elective	4			
ANTH 1101	4					
Elective	4					
		18		16		0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
HIST 2301	4	HIST elective or integrative 3	4	Vacation		Co-op
HIST 2302	1	HIST elective or integrative 4	4			
ANTH 3410	4	ANTH 3421	4			
ANTH area course 1	4	Elective	4			
Elective	4					
		17		16		0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		HIST elective or integrative 5	4	Elective	4	Co-op

ANTH area course 2	4	Elective	4
ANTH elective 1	4		
Elective	4		
	0	16	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 6	4	Elective	4	Co-op	
		ANTH elective 2	4	Elective	4		
		ANTH elective 3	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		HIST capstone or HIST senior project or ANTH capstone	4
		HIST elective or integrative 7	4
		Elective	4
		Elective	4
	0		16

Total Hours: 131

## History and Economics, BA

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level (except from HIST 1200 and HIST 1201).		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 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 1185	Introduction to Middle Eastern History	
HIST 2370	Renaissance to Enlightenment	
HIST 1270	Ancient Greece	
HIST 1271	Ancient Rome	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
<b>Intermediate/Advanced History Courses</b>		
Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.		16
<b>Advanced History</b>		
Complete one history course at the 3000 level or above.		4

## Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000 or HIST 1000	Economics at Northeastern History at Northeastern	1
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4
ECON 3520	History of Economic Thought	4
<b>Economics Electives</b>		
Complete two economics elective courses that are found in the following ranges, with no more than one in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement and ECON 3520 may not be used as economics electives:		8
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		

ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		
<b>Supplemental Courses</b>		
CS 1100	Computer Science and Its Applications	4
MATH 1231	Calculus for Business and Economics	4

### Capstone Requirements

Code	Title	Hours
Complete one of the following options (Public History concentrations complete HIST 4903 and HIST 4904):		
ECON 4692	Senior Economics Seminar	4
HIST 4701	Capstone Seminar	

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		
ECON 3470	American Economic History	4
ECON 1293	European Economic History	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

### History and Economics Major GPA/Credit Requirement

Grades in the following four economics courses must average a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 92 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ECON 1115	4	ECON 1116	4	ECON 2315	4	Elective	4	
ECON 1000 or HIST 1000	1	ECON elective 1	4	HIST elective 3	4	Elective	4	
HIST 1200	1	HIST elective 1	4					
HIST 1201	4	HIST elective 2	4					
Elective	4							
Foreign language or elective	4							
		18			16			8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ECON 2316	4	ECON 2350	4	Elective	4	Co-op		

HIST 2301	4	HIST elective 4	4	Elective	4		4	
HIST 2302	1	HIST elective 5	4					
Elective	4	EESH 2000	1					
Elective	4	Foreign language or elective	4					
		17			17			8

Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Co-op		ECON 2560	4	HIST elective 7	4	Co-op		
		HIST elective 6	4	ECON elective 2	4			
		ENGW 3315	4					
		ECON 3520	4					
		0			16			8

Year 4								
Fall	Hours	Spring	Hours					
Co-op		ECON 4692 or HIST 4701	4					
		ECON 3470, HIST 2360, HIST 2011, or ECON 1293	4					
		Elective	4					
		Elective	4					
		0			16			

Total Hours: 132

## History and English, BA

The English department and the history department offer an interdisciplinary combined major in English and history. Students interested in the combined major in English and history integrate the study of literature and writing with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from the 1000 level.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 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 1185	Introduction to Middle Eastern History	
HIST 2370	Renaissance to Enlightenment	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
<b>Intermediate/Advanced History Courses</b>		
Complete four history courses numbered 2000 or above that have not been used to fulfill another requirement.		16
<b>Advanced History</b>		
Complete one history course at the 3000 level or above that has not been used to fulfill another requirement.		4

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literature to 1500	
ENGL 2296	Early African-American Literature	
ENGL 2240	17th-Century British Literature	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children’s Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	Topics in Writing	
ENGL 3382	Publishing in the 21st Century	
ENGL 3384	The Writer’s Marketplace	

**English Electives**

Complete two additional ENGL electives.	8
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**Capstone**

Code	Title	Hours
Complete one of the following:		4
ENGL 4710	Capstone Seminar	
ENGL 4720	Capstone Project	
HIST 4701	Capstone Seminar	

Public History:

HIST 4903	Fieldwork in History 1
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**Integrative Requirement**

Code	Title	Hours
<b>Required Integrative Course</b>		
ENGL 4400	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	1	HIST elective or integrative 1	4	Vacation		Vacation	
HIST 1200	1	HIST elective or integrative 2	4				
HIST 1201	4	ENGL 1160 or 1410	4				
ENGL 1111	4	Elective	4				
ENGL 1400	4						
Elective	4						
		18			16		
						0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST elective or integrative 3	4	Vacation		Co-op	
HIST 2302	1	HIST elective or integrative 4	4				
Pre-19th-century ENGL	4	19th-, 20th-, or 21st-century ENGL	4				
ENGL theory/methods	4	Elective	4				
Elective	4						
		17			16		
						0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 5	4	Elective	4	Co-op	
		ENGL comparative	4	Elective	4		
		ENGL writing	4				
		Elective	4				
		0			16		
						8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 6	4	Elective		4	Co-op
		ENGL diversity	4	Elective		4	
		Elective	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		HIST capstone or HIST senior project or ENGL capstone	4
		HIST elective or integrative 7	4
		Elective	4
		Elective	4
	0		16

Total Hours: 131

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**History Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level, excluding HIST 1200/1201		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 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	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2390	Africa and the World in Early Times	
<b>Intermediate/Advanced History Cluster</b>		
Complete (3) History courses numbered 2000 or above, excluding 2301/2302.		12
<b>Advanced History</b>		
Complete one history course 3000 level or above		4
<b>History Capstone Seminar or Senior Project</b>		
HIST 4701	Capstone Seminar	
Public history concentrators may also select from the following:		
HIST 4903	Fieldwork in History 1	
<b>Philosophy Requirements</b>		
Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Intermediate/Advanced Electives</b>		
Complete three of the following with at least one course at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	

PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Additional Electives**  
Complete three additional PHIL courses. 8

**Integrative Courses**

Code	Title	Hours
Complete one of the following: 4		
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2395	Japanese Buddhism	

**History and Philosophy Combined Major Credit Requirement**

Complete 85 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1200	1	HIST Introductory Level	4	Vacation		Vacation	
HIST 1201	4	HIST Pre 1800 History Elective	4				
ENGW 1111	4	HIST 1000	1				
PHIL 1115	4	PHIL Intermediate/Advanced Elective	4				
PHIL 2325 or POLS 2325	4	PHIL 2330	4				
		17		17		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST Intermediate/Advanced Elective	4	Vacation		Co-op	
HIST 2302	1	HIST Intermediate/Advanced Elective	4				
PHIL Elective	4	PHIL Intermediate/Advanced Elective	4				

ANTH Area Course	4	PHIL Intermediate/Advanced Elective	4				
PHIL Elective	4	Elective	1				
		17		17		0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST Intermediate/Advanced Elective	4	Elective	4	Co-op	
		PHIL Integrative Course	4	Elective	4		
		PHIL Elective	4				
		HIST Advanced Elective	4				
		0		16		8	0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST Elective or Integrative Course	4	Elective	4	Co-op	
		PHIL Elective	4				
		PHIL Elective	4				
		Elective	4				
		0		16		4	0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HSIT Capstone or Senior Project	4				
		HIST Elective or Integrative Course	4				
		PHIL Intermediate/Advanced Elective	4				
		Elective	4				
		0		16			

Total Hours: 128

**History and Political Science, BA**

The Department of History and the Department of Political Science offer an interdisciplinary combined major in history and political science. Students interested in the combined major integrate the study of political systems and theories with the study and analysis of human history.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## History Major Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level Course</b>		
Complete one course from HIST 1001 to HIST 1999		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 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	
<b>Intermediate/Advanced History Cluster</b>		
Complete three HIST courses numbered 2300 or above. Cluster is subject to department approval.		12
<b>Advanced History</b>		
Complete one HIST course numbered 3000 or above.		4

## Political Science Major Requirements

Code	Title	Hours
<b>Political Science Foundation Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		

Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

### Political Science Electives

Complete three POLS courses numbered 2300 or above.	12
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## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 910).

- American political institutions (p. 910)
- Campaigns and elections (p. 910)
- Comparative politics (p. 910)
- Identity, culture, and politics (p. 910)
- International relations and diplomacy (p. 910)
- Law and legal studies (p. 910)
- Public policy (p. 910)
- Security studies (p. 911)

## Supporting Courses

Code	Title	Hours
Complete one of the following:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

## Integrative Requirement

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
HIST 1130	Introduction to the History of the United States	
HIST 2211	The World Since 1945	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 3800	American Conservatism from the New Deal to the Present	

### Capstone

Complete one of the following. (Public History concentrations take HIST 4903 & HIST 4904)		4
HIST 4701	Capstone Seminar	
HIST 4903	Fieldwork in History 1	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

## History and Political Science Major Credit Requirement

Complete 78 semester hours in the major.

## Program Requirements

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2334	Bureaucracy and Government Organizations	
POLS 2335	Budgeting and Taxation	
POLS 2340	Business and Government	

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**History Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level excluding HIST1200/1201.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 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 2390	Africa and the World in Early Times	
<b>Intermediate/Advanced History</b>		

Code	Title
POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2357	Growth and Decline of Cities and Suburbs
POLS 2390	Science, Technology, and Public Policy
POLS 2395	Environmental Politics and Policy
POLS 3425	U.S. Foreign Policy

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		
POLS 3408	International Security	16
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours				
ENGW 1111	4	POLS 1160	4				
POLS 1155	4	POLS Thought course					
POLS 1150	4						
		12	4				
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS Thought		Co-op		Co-op		Foreign Language	
POLS 2399	4						
Foreign Lanuage							
		4	0	0	0	0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective		Co-op		Co-op		POLS elective	
PHIL 5001	4						
POLS 2400	4						
		8	0	0	0	0	
Year 4							
Fall	Hours						
POLS upper elective							
POLS upper elective							
POLS Thought course							
		0					
Total Hours: 28							



Complete four History courses numbered 2003 or above that have not been used to fulfill another requirement. 16

#### Advanced History

Complete one history course 3000 level or above that have not been used to fulfill another requirement. 4

### Religious Studies Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement: 4		
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2322	Responses to the Holocaust	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3410	Religion and Spirituality in the African Diaspora	
PHIL 4390	Cults and Sects	
PHIL 4545	Religion and Politics in South Asia	
<b>Comparative Religion Elective</b> 4		
Complete one of the following courses that is not used to satisfy another requirement:		
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Electives</b> 20		
Complete six of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:		
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	

PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2322	Responses to the Holocaust
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4545	Religion and Politics in South Asia
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

### Integrative Requirements

Code	Title	Hours
<b>Capstone</b> 4		
Complete one of the following courses that is not used to satisfy another requirement:		
HIST 4701	Capstone Seminar	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
<b>Integrative Course</b> 4		
Complete one of the following courses that is not used to satisfy another requirement:		
HIST 1185	Introduction to Middle Eastern History	
HIST 1290	Modern Middle East	
HIST 2370	Renaissance to Enlightenment	
PHIL 2395	Japanese Buddhism	

### History and Religious Studies Combined Major Credit Requirement

Complete 78 semester hours in the major.

### Program Requirement

128 total semester hours required

## Plan of Study Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1200	1	HIST 1000	1	Vacation		Vacation	
HIST 1201	4	Intro Level History Course	4				
ENGW 1111	4	Lived Religion Elective	4				
PHIL 1110	4	Pre 1800 History Elective	4				
Elective	4	Elective	4				
		17		17		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST Intermediate/Advanced Elective	4	Vacation		Co-op	
HIST 2302	1	HIST Intermediate/Advanced Elective	4				
Comparative Religion Elective	4	Elective	4				
ANTH area course	4	Elective	4				
Elective	4						
		17		16		0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Integrative Course	4	Elective	4	Co-op	
		PHIL 2000 Level Elective	4	Elective	4		
		HIST Advanced Elective	4				
		HIST Intermediate/Advanced Elective	4				
		0		16		8	0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST Elective	4	Elective	4	Co-op	
		PHIL 3000 Level Elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0		16		8	0

Year 5			
Fall	Hours	Spring	Hours
Co-op		Capstone	4
		HIST Elective	4
		Elective	4
		Elective	4
		0	16

Total Hours: 131

### International Affairs and History, BA

Through this combined major, successful undergraduate students will develop a historically contingent awareness of global affairs and international policy issues since the early 20th century through diverse and cross-disciplinary theories of interstate relations, state-society relations, the future of democracy, the nature of citizenship and rights, the origins and conduct of war, the foundations of racial and ethnic conflict and tolerance, and poverty and prosperity. This combined major highlights the importance of understanding the intersection between global issues and local traditions and is designed to prepare students to be politically, culturally, historically, and linguistically sensitive to their interaction.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>International Affairs/History at Northeastern</b>		
INTL 1000 or HIST 1000	International Affairs at Northeastern History at Northeastern	1
<b>International Affairs Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ECON 1115	Principles of Macroeconomics	4

POLS 1160	International Relations	4
POLS 1155 or ANTH 1101	Comparative Politics Peoples and Cultures	4
<b>International Affairs Elective</b>		
Complete one of the following:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
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 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
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	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 4630	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 3408	International Security	

POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
INTL 2240	Global Population and Development
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
INTL 3200	Cities in a Global Context
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
INTL 3200	Cities in a Global Context
ANTH 1101	Peoples and Cultures
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
<i>Development</i>	
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility

or INTB 1209	International Business and Global Social Responsibility
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Communication and Media**

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 of the following, both of which must be in the same region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:	8

**Africa**

AFRS 2307	Africa Today
AFRS 2464	Natural Resources and Sustainable Development
or INTL 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
or INTL 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	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China

HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
HIST 1185	Introduction to Middle Eastern History
ECON 1292	Economic History of the Middle East
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**History Major Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from HIST 1001 to HIST 1999 (excluding 1200/1201).		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 1187	Introduction to Latin American History	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	

**Intermediate History Cluster**

Complete four history courses numbered 2000 or above (excluding 2301, 2302, and 2330). 16

**Advanced History**

Complete one history course at the 3000 level or above. 4

**International Affairs and History Integrative Requirements**

Code	Title	Hours
One course from the Research Methods and Capstone requirements must come from history.		
<b>Research Methods</b>		
Complete one of the following:		4 - 5
INTL 2718	Research Methods in International Affairs	
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4
or HIST 4701	Capstone Seminar	

<b>Integrative Course</b>		
HIST 2011	Capitalism and Business: A Global History	4
or HIST 2311	Colonialism/Imperialism	

**International Affairs and History Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Spring/Summer 1**

<b>Year 1</b>									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
INTL 1000	1	POLS 1160	4	INTL elective	4	Elective	4		
INTL 1101	4	ENGW 1111	4	HIST elective	4	Elective	4		
HIST 1200	1	HIST elective	4						
HIST 1201	4	Foreign language course	4						
ECON 1115	4								
Foreign language course	4								
		18			16			8	8
<b>Year 2</b>									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
POLS 1155	4	Co-op		Co-op		INTL elective	4		
INTL 2718	4					Elective	4		
HIST elective	4								
Foreign language course	4								
EESH 2000	1								
		17			0			0	8
<b>Year 3</b>									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
INTL 3400	4	Co-op		Co-op		INTL elective	4		
Foreign language course	4					Elective	4		
HIST elective	4								
ENGW 3315	4								
		16			0			0	8
<b>Year 4</b>									
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours		
Integrative course	4	INTL 4700	4						
INTL elective	4	HIST elective	4						
HIST elective	4	HIST elective	4						
Elective	4	Elective	4						
		16			16				

Total Hours: 131

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC) and Societies and Institutions (SI) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), Difference and Diversity (DD), and Ethical Reasoning (ER) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		

Complete two of the following: 8

MSCR 2505	Digital Feminisms
MSCR 3600	Film Theory
MSCR 3420	Digital Media Culture
MSCR 3422	Media Audiences
MSCR 4208	TV History

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory-Level Course</b>		
Complete one course in the following range:		4
HIST 1001–HIST 1999		
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one course from the following:		4
HIST 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	
<b>Intermediate/Advanced History Cluster</b>		
Complete three courses in the following range:		12
HIST 2303–HIST 5999		
<b>Advanced History</b>		
Complete one course in the following range:		4
HIST 3000–HIST 5999		
<b>Capstone</b>		
HIST 4701	Capstone Seminar	
<b>Integrative Requirement</b>		
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

### Sample Four Years, Two Co-ops

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	MSCR foundation course	4	Elective	4	Elective	4
HIST 1200 and HIST 1201	5	Intro-level HIST course	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
	18		16		8		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4
MSCR elective	4					Elective	4
HIST 2301 and HIST 2302	5						
Elective	4						
EEAM 2000	1						
	18		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR writing-intensive	4	Co-op		Co-op		Elective	4
Pre-1800 history elective	4					Elective	4
Intermediate/advanced history elective 1	4						
MSCR elective	4						
	16		0		0		8

#### Year 4

Fall	Hours	Spring	Hours
MSCR writing-intensive	4	MSCR elective	4

Intermediate/advanced history elective 2	4	Intermediate/advanced history elective 3	4
Advanced history elective	4	HIST 4701	4
HIST 1279	4	Elective	4
	16		16

Total Hours: 132

## History, BS

The Bachelor of Science (BS) degree emphasizes greater specialization in history, either in public history or in a minor field outside of history, and a course in statistics. These programs are designed for students interested in either public history or in quantitative analysis and the mastery of social science models and methods. Students who plan to go to graduate school in history should consider the possibility of taking language courses as electives, since most graduate programs continue to require foreign language competence.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## History Major Requirements

Code	Title	Hours
<b>Introductory History</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
	Complete two of the following:	8
HIST 1100	Law and History	
HIST 1120	Public History, Public Memory	
HIST 1130	Introduction to the History of the United States	
HIST 1150	East Asian Studies	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	

HIST 1190	Picturing Modernity: The Photographic Image in Culture and Society	
HIST 1215	Origins of Today: Historical Roots of Contemporary Issues	
HIST 1246	World War II in the Pacific	
WMNS 1103	Introduction to Women's, Gender, and Sexuality Studies	

<b>History Seminar and Historical Writing</b>		
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	5

**Additional History Requirements**

Code	Title	Hours
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**Pre-1800 Course**

Complete one of 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 1272	Europe in the Middle Ages, 500–1500	
HIST 1285	Introduction to Russian Civilization	
HIST 2330	Colonial and Revolutionary America	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2390	Africa and the World in Early Times	

**History Outside the United States and Europe**

Complete one of the following: 4

HIST 1150	East Asian Studies	
HIST 1180	African History	
HIST 1185	Introduction to Middle Eastern History	
HIST 1187	Introduction to Latin American History	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1290	Modern Middle East	
HIST 1500	Modern Chinese History and Culture	
HIST 2211	The World Since 1945	
HIST 2214	War in the Modern World	
HIST 2311	Colonialism/Imperialism	
HIST 2351	Modern Japan	
HIST 2390	Africa and the World in Early Times	

**Capstone or Project**

*Requirement for Non-Public History Concentrators*

HIST 4701	Capstone Seminar	4
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*Requirement for Public History Concentrators*

Public history concentrators satisfy this requirement within the concentration.

**Intermediate/Advanced History Course Requirement**

Complete three history courses numbered 2000 or higher, excluding HIST 2301 and HIST 2302.

Code	Title	Hours
	Complete three history courses numbered 2000 or higher, excluding HIST 2301 and HIST 2302.	12

**Optional Public History Concentration**

*Note:*Public History, Public Memory (HIST 1120) is a prerequisite for Fieldwork in History 1 (HIST 4903) .

Code	Title	Hours
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**Public History Courses**

HIST 1120	Public History, Public Memory	4
HIST 4903	Fieldwork in History 1	4

**Graduate Public History Course**

	Complete two graduate-level course in public history. See history faculty adviser for an approved list.	8
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**Supporting Course**

Code	Title	Hours
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**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**

**Four Years, One Co-op**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1000	1	HIST 1130	4	Vacation		Vacation	
HIST 1170	4	Elective		4			
HIST 1200	1	MATH 1215		4			
HIST 1201	4	Elective		4			
ENGW 1111		4					
Elective		4					
	18		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Pre-1800 or non-U.S./ Europe history elective	4	Pre-1800 or non-U.S./ Europe history elective	4	Elective		Co-op	
Elective	4	Elective	4	Elective		4	
Research methods class	4	Intermediate/ Advanced history elective		4			

Elective	4	Elective	4			
	16		16		8	0
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op		HIST 2301	4	Elective	4	Vacation
		HIST 2302	1	Elective	4	
		Intermediate/ Advanced history elective	4			
		Elective	4			
		Elective	4			
	0		17		8	0

<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Intermediate/ Advanced history elective	4	HIST 4701	4			
Elective	4	Elective	4			
Elective	4	Elective	4			
Elective	4	Elective	4			
	16		16			

Total Hours: 131

### Five Years, Three Co-ops in Summer 2/Fall

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
HIST 1000	1	HIST 1130	4	Vacation	0	Vacation
HIST 1170	4	MATH 1215	4			
ENGW 1111	4	Elective	4			
Elective	4	Elective	4			
HIST 1200	1					
HIST 1201	4					
	18		16		0	0

<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Research methods course	4	Elective	4	Vacation	0	Co-op
Elective	4	Elective	4			
Pre-1800 or non-U.S./ Europe History Elective	4	Elective	4			
Elective	4	Pre-1800 or non-U.S./ Europe History Elective	4			
	16		16		0	0

<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	HIST 2301	4	Elective	4	Co-op
		HIST 2302	1	Elective	4	

Elective	4			
Elective	4			
Intermediate/ Advanced History Elective	4			
	0		17	8

<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	Intermediate/ Advanced History Elective	4	Elective	4	Co-op
		Elective	4	Elective	4	
		Elective	4			
		Elective	4			
	0		16		8	0

<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op	0	HIST 4701	4			
		Elective	4			
		Intermediate/ Advanced History Elective	4			
		Elective	4			
	0		16		8	0

Total Hours: 131

## Computer Science and History, BS

The computer science and history combined major offers students the opportunity to gain both historical knowledge and a broad range of related analytical skills in both the humanities and computer science. You'll define a history course cluster according to a thematic principle, with a focus on quantitative analysis in the field, complementing your foundation in programming.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Computer Science Courses**

Code	Title	Hours
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**Computer Science Overview**

CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1

**Computer Science Fundamental Courses**

CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5

**Computer Science Required Courses**

CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4

**Presentation Requirement**

THTR 1170	The Eloquent Presenter	1
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**Khoury Elective Courses**

With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 16 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		

**History Courses**

Code	Title	Hours
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**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 introductory course from the following:

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	
Intermediate/Advanced History Cluster		12
Complete three HIST courses numbered 2303 or above. Cluster is subject to Department approval.		
Complete one advanced-level course:		4
Select from any HIST course numbered 3000 or above.		

**History Capstone Seminar or Senior Project**

Complete one capstone experience from the following:		4
HIST 4701	Capstone Seminar	
Public history concentrators may also select from the following:		
HIST 4903	Fieldwork in History 1	

**Integrative Course Requirement**

Code	Title	Hours
HIST 2211	The World Since 1945	4

**Supporting Courses**

Code	Title	Hours
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**Research Methods**

Complete one course 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 of the following:		4
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 2150	Literature and Digital Diversity	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

### Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

#### Advanced Writing in the Disciplines

This requirement is satisfied by HIST 2302 taken in conjunction with HIST 2301.

### Required General Electives

Code	Title	Hours
Complete 32 credits of general electives.		32

### Khoury College GPA Requirement

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

### Computer Science and History GPA/Credit Requirement

Complete 98 semester hours in the major with a minimum 2.000 GPA

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Writing-Intensive in the Major
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

135 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation	
CS 1800 and CS 1802	5	IS 2000	4	Elective	4		
CS 2500 and CS 2501	5	CS 3200	4				
ENGW 1111	4	Introductory history elective	4				
HIST 1200	1						
HIST 1201	4						
		20	17		8		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 1210	1	Elective	4	Co-op	
HIST 2301	4	Elective	4	Elective	4		
HIST 2302	1	Khoury elective 1	4				
History Pre-1800 elective	4	Intermediate history elective 1	4				
Research methods requirement	4	Intermediate history elective 2	4				
		17	17		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 2	4	Elective	4	Co-op	
		Intermediate history elective 3	4	Elective	4		
		Advanced history elective	4				
		Computing and social issues	4				
		THTR 1170	1				
		0	17		8		0

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Co-op		Khoury elective 3	4	Elective	4
		History capstone seminar or senior project	4	Elective	4
		History integrative requirement	4		
		Khoury elective 4	4		
		0	16		8

Total Hours: 136

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 1800 and CS 1802	5	CS 3200	4				
CS 2500 and CS 2501	5	IS 2000	4				
ENGW 1111	4	Introductory history elective	4				
HIST 1200	1						

**History and Economics, BS**

The Department of History and the Department of Economics offer an interdisciplinary combined major in history and economics. Students interested in the combined major integrate the study of economic systems and theories with the study and analysis of human history.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**History Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level except from HIST 1200 and HIST 1201.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 2390	Africa and the World in Early Times	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1185	Introduction to Middle Eastern History	
HIST 2370	Renaissance to Enlightenment	
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	
<b>Intermediate/Advanced History Courses</b>		
Complete four history courses numbered 2000 or above, excluding HIST 2301 and HIST 2302.		16
<b>Advanced History</b>		
Complete one history course at the 3000 level or above.		4
<b>Supplemental Course for History—Research Methods</b>		
Complete one of the following:		4
ECON 2350	Statistics	

HIST 1201	4						
	20		17		0		0
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CS 1210	1	Co-op		Co-op		Vacation	
CS 3000	4						
CS 3500	4						
HIST 2301	4						
HIST 2302	1						
Research methods requirement	4						
	18		0		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
History Pre-1800 elective	4	Co-op		Co-op		Elective	4
Intermediate history elective 1	4					Elective	4
Elective	4						
Khoury elective 1	4						
THTR 1170	1						
	17		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Khoury elective 2	4	Co-op		Co-op		Elective	4
Intermediate history elective 2	4					Elective	4
Computing and social issues	4						
Elective	4						
	16		0		0		8
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Khoury elective 3	4	Khoury elective 4	4				
Intermediate history elective 3	4	Advanced history elective	4				
Elective	4	History capstone seminar or senior project	4				
Elective	4	History integrative requirement	4				
	16		16				

Total Hours: 136



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

ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 88 semester hours in the major.

### Program Requirement

128 total semester hours required

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
ECON 1000	Economics at Northeastern	1
or HIST 1000	History at Northeastern	

#### 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 elective courses that are found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy the integrative course requirement may not be used as economics electives:

ECON 1200 to ECON 1999	16
ECON 3000 to ECON 4689	
ECON 4900 to ECON 4999	
ECON 5200 to ECON 5999	

#### Supplemental Courses

CS 1100	Computer Science and Its Applications	4
MATH 1231	Calculus for Business and Economics	4

### Capstone Requirements

Code	Title	Hours
Complete one of the following options (public history concentrations complete HIST 4903 and HIST 4904):		
ECON 4692	Senior Economics Seminar	4
HIST 4701	Capstone Seminar	

### Integrative Requirements

Code	Title	Hours
Complete one of the following:		
ECON 3470	American Economic History	4
ECON 1293	European Economic History	
HIST 2360	History of Capitalism in East Asia	
HIST 2011	Capitalism and Business: A Global History	

### History and Economics Major GPA/Credit Requirement

Grades in the following four economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4

### Plan of Study

#### Four Years, Two Co-ops in Summer 2/Fall

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1000 or HIST 1000	1	ECON elective 1	4	ECON elective 2	4	Elective	4
ECON 1115	4	HIST elective 1	4	Elective	4	Elective	4
HIST 1200	1	HIST elective 2	4				
HIST 1201	4	ECON 1116	4				
MATH 1231	4						
Elective	4						
		18		16		8	

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST elective 3	4	HIST elective 5	4	Co-op	
HIST 2302	1	HIST elective 4	4	Elective	4		
CS 1100	4	ECON 2316	4				
ECON 2315	4	Elective	4				
Elective	4						
		17		16		8	

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ECON 2350	4	ECON 2560	4	Co-op	
		ECON elective 3	4	ECON elective 4	4		
		HIST elective 6	4				
		Elective	4				
		0		16		8	

##### Year 4

Fall	Hours	Spring	Hours
Co-op		ECON 4692 or HIST 4701	4
		ECON 3470, HIST 2360, HIST 2011, or ECON 1293	4
		HIST elective 7	4
		Elective	4
		0	
		16	

Total Hours: 131

## History, Minor

The history minor is designed to be flexible so that students may focus on a tailored course of study. There are no prerequisites: Complete five history courses (20 semester hours), of which at least two must be at or above the 2000 level and must be taken at Northeastern. Students are encouraged to choose a cluster of courses around a particular theme. Existing themes include global conflict and war, ancient and early modern worlds, global cultural history, public history, commodities and capitalism, and global security. Students may also focus on particular areas such as the Americas, Europe, East Asia, and Africa.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Complete five history courses, of which at least two must be taken at Northeastern and must be numbered HIST 2000 or higher. History minors must have a total of 20 semester hours in history.

### GPA Requirement

2.000 GPA required in the minor

## Human Services

Website (<http://www.northeastern.edu/humanservices/>)

### Lori Gardinier, PhD

Director, Human Services Program

L.Gardinier@northeastern.edu (l.gardinier@northeastern.edu)

310 Renaissance Park  
617.373.5918  
617.373.7905 (fax)

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 service-learning, co-op, and internship opportunities. Upon completion of the degree students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development.

### Academic Progression Standards

After four semesters, students must maintain a minimum 2.000 grade-point average (GPA), have earned at least 64 semester hours, and should have completed the following courses:

Code	Title	Hours
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3900	Social Policy	4
An approved organizations course		
At least one specialization course (see adviser)		

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. 925)
- Human Services and Communication Studies (p. 147)
- Human Services and International Affairs (p. 927)
- Human Services and Sociology (p. 934)
- Political Science and Human Services (p. 931)

### Bachelor of Science (BS)

- Human Services (p. 935)
- Human Services and Criminal Justice (p. 795)
- Human Services and Sociology (p. 944)
- American Sign Language and Human Services (p. 811)
- Political Science and Human Services (p. 942)

### Minor

- Human Services (p. 946)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Human Services, BA

The human services major prepares students for careers in social change by providing the theoretical and skill-based background necessary for practice and research. Upon completion of the degree, students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Students have an opportunity to develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities. All students declare a specialization within the major that reflects their particular focus in the field.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Human Services Major Requirements

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

<b>Human Services Electives</b>		
Complete four HUSV courses.		16

<b>Senior Seminar and Internship</b>		
HUSV 4700	Senior Seminar in Human Services	4
HUSV 4994	Human Services Internship	6

### Human Services Major Credit Requirement

Complete 50 semester hours in the major.

### Program Requirement

130 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	HUSV 2300	4	Vacation	0	Vacation	0
HUSV 1101	4	HSVC elective	4				
ENGW 1111	4	Elective	4				
Elective	4	MATH 1215	4				
Elective	4						
		17			16		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSVC Elective	4	HSVC organization course	4	Vacation	0	Co-op	0
HSVC Elective	4	Foreign language core course	4				
Elective	4	Elective	4				
Foreign language core course	4	Elective	4				

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Elective	4	Co-op	0
		HUSV 2970	4	Elective	4		
		Foreign language core course	4				
		Elective	4				
		0			16		
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	HUSV 4994	6	Elective	4	Co-op	0
		HUSV 3900	4	Elective	4		
		HSVC Elective	4				
		Elective	4				
		0			18		
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	HUSV 4700	4				
		HSVC elective	4				
		Elective	4				
		HSVC diverse population course	4				
		0			16		

Total Hours: 132

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	HUSV 2300	4	Vacation	0	Vacation	0
HUSV 1101	4	HSVC elective	4				
ENGW 1111	4	Elective	4				
Elective	4	MATH 1215	4				
Elective	4						
		17			16		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
HSVC elective	4					Elective	4
Foreign language core course	4						
Elective	4						
EESH 2000	1						
		17			0		

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSVC organization course	4	Co-op	0	Co-op	0	Elective	4
Foreign language core course	4					Elective	4
Elective	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3315	4	Co-op	0	Co-op	0	Vacation	0
HSVC Elective	4						
HUSV 2970	4						
HSVC Elective	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
HUSV 4994	6	HUSV 4700	4
HUSV 3900	4	Elective	4
Foreign language core course	4	Elective	4
Elective	4	HSVC diverse population course	4
	18		16

Total Hours: 132

**Human Services and International Affairs, BA**

The combined human services and international affairs degree offers students an understanding of geopolitical realities paired with the practical skills and theory necessary to work in social services and non governmental organizations (NGOs) impacted by global issues. Students will have the opportunity to prepare for practice in international NGOs through co-ops and Dialogue of Civilization programs. This combined major will prepare students for positions within the nonprofit sector with an international focus.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Human Services Requirements**

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
or INTL 2718	Research Methods in International Affairs	
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services Electives</b>		
Complete three HUSV courses.		12

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	

**Global Dynamics**

Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4

*Environment*

ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
SOCL 1246	Environment and Society

*Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication
INTL 2480 or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2400	Politics of Islam and Gender
INTL 2480 or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

*Globalization*

ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics

or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENVR 2515	Sustainable Development
ENTR 2206	Global Social Enterprise
HIST 2011	Capitalism and Business: A Global History
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
INTB 1203 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 or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global 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

Code	Title	Hours
Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:		12

### Africa

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

### Asia

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
INTL 4350	Ethnography of Southeast Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

### Europe

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History

HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
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 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

### Middle East

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

### Russia

HIST 1285	Introduction to Russian Civilization
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HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

### Human Services/International Affairs Integrative Courses

Complete Senior Seminar in Human Services (HUSV 4700) or Senior Capstone Seminar in International Affairs (INTL 4700) or both. Note, however, that students wishing to take HUSV 4700 but not INTL 4700 must meet with an INTL adviser to obtain approval for a substitute INTL course. Similarly, students wishing to take INTL 4700 but not HUSV 4700 must meet with an HUSV adviser to obtain approval for a substitute HUSV course. Substitute courses (HUSV or INTL) must be upper-division courses and must relate to the combined major.

Code	Title	Hours
<b>Human Services</b>		
HUSV 4700	Senior Seminar in Human Services	4
<b>International Affairs</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

### Human Services and International Affairs Combined Major Credit Requirement

Complete 84 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	Elective	4	Vacation	0	Vacation	0
INTL 1000	1	Foreign language core course	4				
INTL 1101	4	HUSV 2300	4				
HUSV 1101	4	ECON 3290	4				
HSVC elective	4						
	17		16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Elective	4	Vacation	0	Co-op	0
Foreign language core course	4	HUSV 2970	4				
INTL elective	4	HUSV 3900	4				
HSVC elective	4	INTL 3400	4				
		EESH 2000	1				
	16		17		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4	Elective	4	Co-op	0
		INTL elective	4	INTL elective	4		
		HSVC elective	4				
		SOCL 3440	4				
	0		16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Elective	4	Co-op	0
		Elective	4	INTL elective	4		
		INTL elective	4				
		HUSV 4994	6				
	0		18		8		0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4				
		INTL elective	4				
		HUSV 4700	4				
		INTL 4700	4				
	0		16				

Total Hours: 132

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	Elective	4	Vacation	0	Vacation	0
INTL 1000	1	Foreign language core course	4				
INTL 1101	4	HUSV 2300	4				
HUSV 1101	4	ECON 3290	4				
HSVC elective	4						
	17		16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
Foreign language core course	4					INTL elective	4
HSVC elective	4						
HUSV 3900	4						
EESH 2000	1						
	17		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
INTL elective	4					INTL elective	4
HUSV 2970	4						

HSVC elective	4				
	16	0	0	8	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
ENGW 3315	4	Co-op	0	Co-op	0
Elective	4				
INTL elective	4				
HUSV 4994	6				
	18	0	0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
HSVC policy course	4	INTL elective	4		
SOCL 3440	4	Elective	4		
Elective	4	HUSV 4700	4		
INTL elective	4	INTL 4700	4		
	16		16		

Total Hours: 132

## Political Science and Human Services, BA

The combined degree is designed to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students prepare for fields in the social change arena (nongovernment organizations [NGOs], counseling, and political advocacy). Political science students prepare to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, internship, and study-abroad opportunities. Upon completion of the degree, successful students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are positioned to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete three courses in the following range:		12
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 932)
- Campaigns and Elections (p. 932)
- Comparative Politics (p. 932)
- Identity, Culture, and Politics (p. 932)
- International Relations and Diplomacy (p. 933)
- Law and Legal Studies (p. 933)
- Public Policy (p. 933)
- Security Studies (p. 933)

### Supporting Course for Political Science

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

### Human Services Requirements

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4

HUSV 2355	Race, Identity, Social Change, and Empowerment
HUSV 2800	Sexual Orientation and Gender Expression
HUSV 2960	Intercultural Studies through Human Services

**Human Services Electives**

Complete three HUSV courses. 12

**Integrative Requirements**

Code	Title	Hours
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**Integrative Courses**

POLS 3307	Public Policy and Administration	4
HUSV 3900	Social Policy	4

**Research Methods**

Complete one of the following: 4

POLS 2399	Research Methods in Political Science
HUSV 2970	Research Methods for Human Services

**Capstone and Elective**

Complete one of the following options: 8

*Option A*

Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:

POLS 4701	Political Science Senior Capstone
or POLS 4703	Senior Thesis
HUSV 2000 to HUSV 5999	

*Option B*

Complete HUSV 4700 and complete one additional political science course numbered 2300 or higher that has not been used in previous requirements:

HUSV 4700	Senior Seminar in Human Services
POLS 2300 to POLS 5999	

**Political Science and Human Services Combined Major Credit Requirement**

Complete 86 semester hours in the major.

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
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Complete four of the following: 16

POLS 2350	State and Local Politics
POLS 3300	The U.S. Congress
POLS 3302	Judicial Process and Behavior
POLS 3307	Public Policy and Administration
POLS 3310	Public Opinion, Voting, and Elections
POLS 3160	Campaign Strategy
POLS 3162	Local Campaigns and Elections

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
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**Required Courses**

POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8

POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2355	Intergovernmental Relations
POLS 3310	Public Opinion, Voting, and Elections
POLS 3162	Local Campaigns and Elections
POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
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**Theoretical Requirement**

Complete one of the following: 4

POLS 2370	Religion and Politics
POLS 3418	Nationalism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

**Regional Requirements**

Complete two of the following: 8

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

**Experiential/Practicum Requirement**

Complete one of the following: 4

POLS 4915	Model Arab League
POLS 4918	Model NATO
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
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**Core Course**

POLS 3418	Nationalism	4
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**Electives**

Complete three of the following: 12

POLS 2360	Politics of Poverty
POLS 2368	Music and Politics in America and Abroad
POLS 2370	Religion and Politics
POLS 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1155	4	POLS 1150	4		
ENGW 1111	4	POLS 1160	4		
HUSV 1000 or POLS 1000	1	HUSV 2300	4		
HUSV 1101	4	Foreign Language	4		
HUSV elective	4				
		17		16	
				0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESH 2000	1	Co-op		Co-op		Foreign language	4
POLS thought	4					POLS 2400 supporting course	4
HS Diverse Populations Course	4						
Research Methods course	4						
HUSV elective	4						
		17		0		0	
						8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 2400	4	Co-op		Co-op		POLS elective	4
Foreign Language	4					HUSV elective	4
POLS 3307	4						
HUSV 3900	4						
		16		0		0	
						8	

Year 4			
Fall	Hours	Spring	Hours
Capstone and Elective	8	POLS elective	4
HUSV470C + 1 POLS course (Option A) or POLS4701 (Or POLS4703 and 1 HUSV course (Option B))			

POLS elective	4 HUSV 3570	4
Foreign language	4 Elective	4
	Elective	4
	16	16

**Year 5**

Fall	Hours
HUSV 4994	6
Elective	4
Elective	4
	14

Total Hours: 128

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Human Services Requirements

Code	Title	Hours
<b>Required Human Services Courses</b>		
HUSV 1101	Social Change and Human Services	4

HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6

### Research Methods

Complete option A or option B: 4-8

#### Option A

Complete the following course:

HUSV 2970 Research Methods for Human Services

#### Option B

Complete the following and one additional HUSV course:

SOCL 2321 Research Methods in Sociology

### Human Services Elective

Complete three additional HUSV courses. 12

### Senior Capstone <sup>1</sup>

HUSV 4700 Senior Seminar in Human Services 4

<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

### Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
<b>Introductory Electives</b>		
Complete two of the following:		8
ANTH 1101	Peoples and Cultures	
SOCL 1120	Society and Health	
SOCL 1228	Social Problems	
SOCL 1241	Violence and Society	
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 1290	Juvenile Delinquency	
SOCL 1295	Drugs and Society	

### Intermediate-Level Elective

Complete two of the following: 8

ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
ANTH 2305	Global Markets and Local Culture	
SOCL 2268	Social Movements	
SOCL 2270	Race and Ethnic Relations	
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 3441	Sociology of Health and Illness	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3487	Applied Sociology: Practice and Theory	

### Advanced-Level Elective

Complete one of the following: 4

ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
ANTH 4580	Special Topics in Anthropology	
SOCL 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	

<b>Senior Seminar<sup>2</sup></b>		
SOCL 4600	Senior Seminar	4

<sup>2</sup> With permission of the sociology head adviser, the student may complete human services capstone Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

**Human Services/Sociology Integrative Course**

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Human Services and Sociology Combined Major Credit Requirement**

Complete a minimum of 78 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, No Co-op**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	HUSV 2300	4				
SOCL 1101	4	SOCL Introductory Elective 2	4				
SOCL Introductory Elective 1	4	HSVC elective	4				
	16		16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	AMSL 2102	4	Vacation	0	Vacation	0
Elective	4	DEAF 2700	4				
HUSV Elective	4	Elective	4				
HUSV Elective	4	Elective	4				
	16		16		0		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 2355	4	Research (choose one of the following)	4	Vacation	4	Vacation	0
HUSV 3570	4	HUSV 2971	4				
SOCL 2320 (elective)	4	SOCL 2321	4				
SOCL 3300	4	Elective	4				
		SOCL Intermediate-Level Elective	4				
		ENGW 3315	4				
	16		16		0		0

Year 4			
Fall	Hours	Spring	Hours
HUSV 3900	4	HUSV 4700	4
HUSV 4994	6	SOCL 4600	4
Elective	4	Elective	4
SOCL Advanced-Level Elective	4	Elective	4
	18		16

Total Hours: 130

**Human Services, BS**

The human services major prepares students for careers in social change by providing the theoretical and skill-based background necessary for practice and research. Upon completion of the degree, students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Students have an opportunity to develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).



### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Human Services Major Requirements

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

<b>Human Services Electives</b>		
Complete six HUSV courses.		24

<b>Senior Seminar and Internship</b>		
HUSV 4700	Senior Seminar in Human Services	4
HUSV 4994	Human Services Internship	6

### Human Services Major Credit Requirement

Complete 58 semester hours in the major.

### Program Requirement

130 total semester hours required

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	HUSV 2300	4	Vacation	0	Vacation	0
HUSV 1101	4	HSVC elective	4				
ENGW 1111	4	Elective	4				
Elective	4	MATH 1215	4				
Elective	4						
		17			16		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSVC Elective	4	HUSV 3570	4	Vacation	0	Co-op	0
HSVC Elective	4	HSVC Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
		16			17		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Elective	4	Co-op	0
		HUSV 2970	4	Elective	4		
		HSVC Elective	4				
		Elective	4				
		0			16		

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	HUSV 3900	4	Elective	4	Co-op	0
		HUSV 4994	6	Elective	4		
		Elective	4				
		HSVC Elective	4				
		0			18		

Year 5							
Fall	Hours	Spring	Hours				
Co-op	0	HUSV 4700	4				
		HSVC elective	4				
		HSVC diverse population course	4				
		Elective	4				
		0			16		

Total Hours: 132

### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	HUSV 2300	4	Vacation	0	Vacation	0
HUSV 1101	4	Elective	4				
ENGW 1111	4	Elective	4				
Elective	4	MATH 1215	4				
Elective	4						
		17			16		

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSVC Elective	4	Co-op	0	Co-op	0	Elective	4
HSVC Elective	4					Elective	4
Elective	4						
Elective	4						
EESH 2000	1						
		17			0		

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
HUSV 3570	4					Elective	4
ENGW 3315	4						

Elective	4						
	16		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
HUSV 2970	4	Co-op	0	Co-op	0	Vacation	0
Elective	4						
HSVC	4						
Elective							
HSVC	4						
elective							
	16		0		0		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
HUSV 4994	6	HUSV 4700	4				
HUSV 3900	4	HSVC	4				
		Elective					
HSVC	4	HSVC	4				
Elective		diverse					
		population					
		course					
Elective	4	Elective	4				
	18		16				

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. 46).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### American Sign Language Requirements

Code	Title	Hours
<b>American Sign Language</b>		
AMSL 1101	Elementary ASL 1	4
AMSL 1102	Elementary ASL 2	4
AMSL 2101	Intermediate ASL 1	4
AMSL 2102	Intermediate ASL 2	4
AMSL 3101	Advanced ASL 1	4
AMSL 3102	Advanced ASL 2	4
<b>Social and Cultural World</b>		
DEAF 1500	Deaf People in Society	4
DEAF 2500	Deaf History and Culture	4
<b>Linguistics</b>		
LING 1150	Introduction to Language and Linguistics	4
DEAF 2700	ASL Linguistics	4
<b>Performance Interpreting</b>		
INTP 3500	The Interpreting Profession	2
<b>Interpreting</b>		
INTP 3510	Interpreting Inquiry Texts	4

### Human Services Requirements

Code	Title	Hours
<b>Human Services</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4700	Senior Seminar in Human Services	4
<b>Organizations</b>		
SOCL 3440	Sociology of Human Service Organizations	4
<b>Human Services Elective</b>		
	Complete one course in HUSV subject area.	4

#### Integrative Requirement

Code	Title	Hours
INTP 4940	Interpreting Research Capstone	4
HUSV 4994	Human Services Internship	6

#### Combined-Major GPA Requirement

Minimum 2.750 GPA required in all ASL courses

Minimum 2.500 overall GPA required

#### Combined-Major Credit Requirement

Complete 88 semester hours in the major.

#### Program Requirements

128 total semester hours required

## Plan of Study

### Four Years, No Co-op

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 1101	4	AMSL 1102	4	Vacation	0	Vacation	0
DEAF 1500	4	MATH 1215	4				
HUSV 1101	4	HSVC elective	4				
ENGW 1111	4	Elective	4				
	16		16		0		0

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
AMSL 2101	4	AMSL 2102	4	Vacation	0	Vacation	0
LING 1150	4	DEAF 2700	4				
Elective	4	HUSV 2300	4				
INTP 3500	2	Elective	4				
	14		16		0		0

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
DEAF 2500	4	HUSV 2970	4	Vacation	0	Vacation	0
SOCL 3440	4	Elective	4				
INTP 3510	4	ENGW 3315	4				
AMSL 3101	4	AMSL 3102	4				
	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
	18		12

Total Hours: 124

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Human Services Requirements

Code	Title	Hours
<b>Human Services Overview</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970	Research Methods for Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

### Human Services Elective

Complete two additional HUSV courses. 8

### Communication Studies Requirements

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	

COMM 2304	Communication and Gender
COMM 2501	Communication Law
COMM 2551	Free Speech in Cyberspace

**Writing-Intensive Courses**

Complete two of the following:	8
COMM 3200	Mobile Communication
COMM 3201	Health Communication
COMM 3230	Interpersonal Communication
COMM 3304	Communication and Inclusion
COMM 3320	Political Communication
COMM 3414	Great Speakers and Speeches
COMM 3415	Communication Criticism
COMM 3445	Public Relations Principles
COMM 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 COMM courses	12
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**Capstone**

Complete one of the following capstone/senior seminar options:

Code	Title	Hours
<b>Communications Capstone Option</b>		
Complete one of the following courses:		4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4625	Online Communities	
Complete one additional HUSV elective.		4
<b>Human Services Capstone Option</b>		
HUSV 4700	Senior Seminar in Human Services	4
Complete one course in the following range:		4
COMM 3000 to COMM 4999		

**Integrative Course**

Code	Title	Hours
HUSV 3590	Nonprofit Communications	4

**Communication Studies Major Grade Requirement**

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
COMM 1000 or HUSV 1000	1	MATH 1215	4	Communication Studies foundation course	4	Communication Studies cluster course	4
HUSV 1101	4	HUSV 2300	4	Communication Studies elective	4	Communication Studies elective	4
ENGW 1111	4	HUSV Elective	4				
COMM 1101	4	COMM 1112 or 2301	4				
Elective	4						
		17		16		8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 2970	4	CO-OP		CO-OP		Communication Studies writing-intensive	4
Communication Studies elective	4					Elective	4
Elective	4						
HUSV Elective	4						
EEAM 2000	1						
		17		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Human Services Diverse Populations	4	CO-OP		CO-OP		Communication Studies writing-intensive	4
HUSV 3570	4					Elective	4
ENGW 3315	4						
Elective	4						
		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours
HUSV 3900	4	Capstone	4
HUSV 3590	4	Elective	4
Additional COMM/HUSV Elective	4	Elective	4
Elective	4	HUSV 4994	6
		16	
		18	

Total Hours: 132

**Human Services and Criminal Justice, BS**

A combined major in human services and criminal justice appeals to students interested in the intersection of social and legal issues and

institutions. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. Students with criminal justice course work gain a rigorous interdisciplinary and experiential education in the causes and consequences of crime and the responses of criminal justice. The addition of human services course work complements a criminal justice perspective and considers the role of social services and community-based organizations to prevent, intervene, and treat the causes and consequences of crime. The degree allows students to combine interests in the justice system, political advocacy, and community development. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, and internship opportunities.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Foundation Courses

Code	Title	Hours
<b>Introduction to the Major</b>		
CRIM 1000 or HUSV 1000	Criminal Justice at Northeastern Human Services at Northeastern	1
<b>Criminal Justice Foundation Courses</b>		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 1300 or CRIM 1400 or CRIM 1500 or CRIM 1700	The Death Penalty Human Trafficking Corruption, Integrity, and Accountability Crime, Media, and Politics	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
CS 1100	Computer Science and Its Applications	4
<b>Human Services Foundation Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4

### Upper-Level Courses

Code	Title	Hours
<b>Human Services Upper Level Courses</b>		
HUSV 3900	Social Policy	4
<b>Human Services Elective</b>		

Complete one course from the HUSV subject code. 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 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	

### Research Methods

CRIM 3600 or HUSV 2970	Criminal Justice Research Methods Research Methods for Human Services	4
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### Criminal Justice Elective

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice	
CRIM 4020	Race, Crime, and Justice	
CRIM 4040	Crime Prevention	

### Statistics

Complete one of the following: 4

CRIM 3700	Analyzing and Using Data on Crime and Justice	
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 or HUSV 4700	Senior Capstone Seminar Senior Seminar in Human Services	4

### Major Electives

Code	Title	Hours
Complete seven courses. Two of these courses must be in criminal justice and four must be in human services.		28

### Cooperative Education for Criminal Justice

Code	Title	Hours
<b>Co-op Integration Seminar 1/Professional Development</b>		
All students should complete one of the following:		1
CRIM 2000	Co-op Integration Seminar 1	
EESH 2000	Professional Development for Co-op	
<b>Co-op Integration Seminars 2 and 3</b>		
Co-op students should complete the following:		
CRIM 3000	Co-op Integration Seminar 2	1
CRIM 4000	Co-op Integration Seminar 3	1

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 1300, 1400, 1500, or 1700	4	Vacation	0	Vacation	0
CRIM 1100	4	HUSV 2300	4				
HUSV 1101	4	CS 1100	4				
ENGW 1111	4	HSVC elective	4				
MATH 1215	4						
		17			16		
					0		
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 2100	4	CRIM 2000	1	Vacation	0	Co-op	0
CRIM 2200	4	CJ concentration elective	4				
HSVC intermediate/advanced undergraduate elective	4	CJ concentration elective	4				
Elective	4	Elective	4				
		16			17		
					0		
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CRIM 3000	1	CRIM 3600	4	Co-op	0
		Elective	8	Elective	4		
		HUSV 3900	4				
		HSVC organization course	4				
		0			17		
					8		
						0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CRIM 4000	1	Elective	4	Co-op	0
		CJ system-wide elective	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		CRIM 3700	4				
		0			17		
					8		
						0	
Year 5							
Fall	Hours	Spring	Hours				
Co-op	0	HUSV 4994	6				
		Elective	4				
		CRIM 4949 or HUSV 4700	4				

Elective	4
0	18

Total Hours: 134

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1000	1	CRIM 1300, 1400, 1500, or 1700	4	Vacation	0	Vacation	0
CRIM 1100	4	HUSV 2300	4				
HUSV 1101	4	CS 1100	4				
ENGW 1111	4	HSVC elective	4				
MATH 1215	4						
		17			16		
					0		
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 2100	4	Co-op	0	Co-op	0	Elective	4
CRIM 2200	4					Elective	4
CRIM 2000	1						
HUSV 2300	4						
Elective	4						
		17			0		
					0		
						8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CJ concentration elective	4	Co-op	0	Co-op	0	Elective	4
CJ concentration elective	4					HUSV 3900	4
Elective	4						
Elective	4						
CRIM 3000	1						
		17			0		
					0		
						8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3600	4	Co-op	0	Co-op	0	Vacation	0
HSVC organization course	4						
CJ system-wide elective	4						
Elective	4						
CRIM 4000	1						
		17			0		
					0		
						0	
Year 5							
Fall	Hours	Spring	Hours				
CRIM 3700	4	Elective	4				
HUSV 4994	6	Elective	4				
ENGW 3315	4	CRIM 4949 or HUSV 4700	4				



Elective	4	Elective	4
	18		16

Total Hours: 134

## Political Science and Human Services, BS

The combined degree seeks to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students are well positioned to pursue fields in the social change arena (nongovernment organizations, or NGOs; counseling; and political advocacy). Political science students are also well positioned to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, internship, and study-abroad opportunities. Upon completion of the degree, students can apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are poised to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		

Complete three courses in the following range: 12  
POLS 2000 to POLS 5999

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 943)
- Campaigns and Elections (p. 943)
- Comparative Politics (p. 943)
- Identity, Culture, and Politics (p. 943)
- International Relations and Diplomacy (p. 943)
- Law and Legal Studies (p. 943)
- Public Policy (p. 944)
- Security Studies (p. 944)

### Supporting Course for Political Science

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

### Human Services Requirements

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

### Human Services Electives

Complete three HUSV courses. 12

### Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3307	Public Policy and Administration	4
HUSV 3900	Social Policy	4
<b>Research Methods</b>		
Complete one of the following:		4
POLS 2399	Research Methods in Political Science	
HUSV 2970	Research Methods for Human Services	

### Capstone and Elective

Complete one of the following options: 8

**Option A**

Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:

POLS 4701	Political Science Senior Capstone
or POLS 4703	Senior Thesis
HUSV 1100 to HUSV 5999	

**Option B**

Complete HUSV 4700 and complete one additional political science course numbered 2000 or higher that has not been used in previous requirements:

HUSV 4700	Senior Seminar in Human Services
POLS 2000 to POLS 5999	

**Political Science and Human Services Combined Major Credit Requirement**

Complete 86 semester hours in the major.

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	

POLS 3418	Nationalism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

**Regional Requirements**

Complete two of the following: 8	
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

**Experiential/Practicum Requirement**

Complete one of the following: 4	
POLS 4915	Model Arab League
POLS 4918	Model NATO
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following: 12		
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	

POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1			
Fall	Hours	Spring	Hours
HUSV 1000 or POLS 1000	1	POLS 1150	4
POLS 1155	4	POLS 1160	4
ENGW 1111	4	HUSV 2300	4
HUSV 1101	4	HUSV elective	4
Elective	4		
		17	16

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESH 2000	1	Co-op		Co-op		POLS 2400 supporting course	4
POLS thought	4					HUSV elective	4

HUSV diverse population course	4			
HUSV 3570	4			
Research methods course	4			
<hr/>				
	17	0	0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op		Co-op		POLS elective	4
POLS 2400	4					HUSV elective	4
POLS 3307	4						
HUSV 3900	4						
		16	0	0			8

Year 4			
Fall	Hours	Spring	Hours
POLS elective	4	Elective	4
Capstone and elective	8	Elective	4
HUSV 4700 and one POLS course (Option A) or POLS 4701 (or POLS 4703) and one HUSV course (Option B)		Elective	4
Elective	4	Elective	4
		16	16

Year 5	
Fall	Hours
HUSV 4994	6
Elective	4
Elective	4
<hr/>	
14	

Total Hours: 128

**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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Human Services Requirements**

Code	Title	Hours
<b>Human Services Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services Electives</b>		
Complete three additional HUSV courses.		12
<b>Research Methods</b>		
Complete option A or option B:		4-8
<i>Option A</i>		
HUSV 2970	Research Methods for Human Services	
<i>Option B</i>		
SOCL 2321	Research Methods in Sociology	
and		
Complete an additional HUSV Elective		
<b>Senior Capstone <sup>1</sup></b>		
HUSV 4700	Senior Seminar in Human Services	4

<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

**Sociology Requirements**

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4

SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4

**Introductory Electives**

Complete two of the following:		8
SOCL 1120	Society and Health	
SOCL 1228	Social Problems	
SOCL 1241	Violence and Society	
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 1290	Juvenile Delinquency	
SOCL 1295	Drugs and Society	
ANTH 1101	Peoples and Cultures	

**Intermediate-Level Elective**

Complete two of the following:		8
SOCL 2268	Social Movements	
SOCL 2270	Race and Ethnic Relations	
SOCL 2358	Current Issues in Cities and Suburbs	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
SOCL 3441	Sociology of Health and Illness	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3487	Applied Sociology: Practice and Theory	

**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 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
ANTH 4580	Special Topics in Anthropology	

**Senior Seminar <sup>2</sup>**

SOCL 4600	Senior Seminar	4
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<sup>2</sup> With permission of the sociology head adviser, the student may complete Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

**Human Services/Sociology Integrative Course**

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

## Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

## Human Services and Sociology Combined Major Credit Requirement

Complete 78 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, No Co-op

##### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	HUSV 2300	4				
SOCL 1101	4	SOCL Introductory Elective 2	4				
SOCL Introductory Elective 1	4	HSVC elective	4				
	16		16		0		0

##### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV Elective	4	HUSV 2355	4	Vacation	0	Vacation	0
HUSV Elective	4	SOCL Intermediate Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
	16		16		0		0

##### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2320	4	HUSV 2970 or SOCL 2321	4	Vacation	0	Vacation	0
SOCL 3300	4	Elective	4				
Elective	4	SOCL Intermediate-Level Elective	4				
HUSV 3570	4	ENGW 3315	4				
	16		16		0		0

##### Year 4

Fall	Hours	Spring	Hours
HUSV 3900	4	HUSV 4700	4
HUSV 4994	6	SOCL 4600	4
Elective	4	Elective	4
SOCL Advanced-Level Elective	4	Elective	4
	18		16

Total Hours: 130

## Human Services, Minor

The human services minor is designed to prepare students for careers in social change by providing the theoretical and skill-based background necessary for practice and research. Students have an opportunity to develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at individual and structural levels. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning. The minor provides a nice complement to students who are interested in the role of social change through counseling, nonprofits interventions, or social policy as it relates to their major.

The minor in human services may help lead to careers in many diverse areas of social change or to graduate programs in social work, health, counseling, rehabilitation, and law. Human services professions are among the fastest-growing occupations in the nation. Society recognizes the necessity, value, and reward of dedicating time and energy to helping people and communities. Combining a human services minor with any major gives students the opportunity to learn about the individual, community, and political interventions for social change.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Course

Code	Title	Hours
HUSV 1101	Social Change and Human Services	4

### Human Services Electives

Code	Title	Hours
Complete four HUSV courses.		16
HUSV 2300	Counseling in Human Services	
HUSV 2320	Techniques in Individual and Group Counseling	
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2400	Food Justice and Community Development	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2970	Research Methods for Human Services	
HUSV 2960	Intercultural Studies through Human Services	
HUSV 3520	Child Intervention and Treatment	
HUSV 3540	Addiction and Recovery	
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	
HUSV 3580	Sexual Violence: Counseling, Programs, and Policy	
HUSV 3590	Nonprofit Communications	
HUSV 3900	Social Policy	
HUSV 4994	Human Services Internship	

### GPA Requirement

2.000 GPA required in the minor

## International Affairs

Website (<http://www.northeastern.edu/internationalaffairs/>)

### Berna Turam, PhD

Professor, Sociology and International Affairs, and Director, International Affairs Program  
201 Renaissance Park  
617.373.5472

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. 947)
- International Affairs with African Studies Concentration (p. 951)
- International Affairs with Asian Studies Concentration (p. 953)
- International Affairs with European Studies Concentration (p. 956)
- International Affairs with Latin American Studies Concentration (p. 958)
- International Affairs with Middle East Studies Concentration (p. 960)
- Environmental Studies and International Affairs (p. 642)
- Human Services and International Affairs (p. 927)
- International Affairs and Criminal Justice (p. 775)
- International Affairs and Cultural Anthropology (p. 974)
- International Affairs and Economics (p. 827)
- International Affairs and History (p. 913)
- International Affairs and Religious Studies (p. 985)
- Political Science and International Affairs (p. 990)
- Sociology and International Affairs (p. 995)
- Spanish and International Affairs (p. 804)

#### Bachelor of Science (BS)

- International Affairs and International Business (<http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/international-affairs/international-affairs-international-business-bs/>)

### Minors

- International Affairs (p. 1003)
- Middle East Studies (p. 1005)

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ANTH 1101	Peoples and Cultures	4
POLS 1160	International Relations	4
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	



INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		8
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
	or WMNS 2480 Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
	or WMNS 2480 Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 4630	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
	or INTL 3300 Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 4918	Model NATO	

*Globalization*

ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
	or WMNS 2480 Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

INTL 2240	Global Population and Development
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
	or INTB 1209 International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
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

<b>Senior Seminar/Experiential Learning</b>	
INTL 4700	Senior Capstone Seminar in International Affairs 4

**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 adviser. See department for additional courses:

Code	Title	Hours
<b>Africa</b>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
HIST 1180	African History	
HIST 2390	Africa and the World in Early Times	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
<b>Asia</b>		
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
INTL 4350	Ethnography of Southeast Asia	
or ANTH 4350	Ethnography of Southeast Asia	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	

HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions

PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**International Affairs Major Credit/GPA Requirement**

Complete 52 semester hours in the major with a 2.000 GPA.

**Upper-Division Electives**

Complete three general electives at 3000 level or above that do not double-count with the major or NUpath.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	MATH 1215	4	Vacation	0	Vacation	0
INTL 1101	4	HIST 2211	4				
ENGW 1111	4	Foreign language course	4				
Foreign language course	4	POLS 1160	4				
ANTH 1101	4						
		17			16		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115 or 1116	4	INTL elective	4	Vacation	0	Co-op	0
INTL 2718	4	Foreign language course	4				
Elective	4	INTL elective	4				
Foreign language course	4	Elective	4				
		EESH 2000	1				
		16			17		
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-division elective	4					
		0			16		
					8		
					0		
<b>Year 4</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL elective	4	Elective	4	Co-op	0
		INTL elective	4	Elective	4		
		Upper-division elective	4				
		Elective	4				
		0			16		
					8		
					0		
<b>Year 5</b>							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL 4700	4				
		Elective	4				
		Upper-division elective	4				
		Elective	4				
		0			16		

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	MATH 1215	4	Vacation	0	Vacation	0
INTL 1101	4	HIST 2211	4				
ENGW 1111	4	Foreign language course	4				
Foreign language course	4	POLS 1160	4				
ANTH 1101	4						
		17			16		
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 language course	4						
Elective	4						
EESH 2000	1						
		17			0		
					0		
					8		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115 or 1116	4	Co-op	0	Co-op	0	Elective	4
Elective	4					Elective	4
INTL elective	4						

Foreign language course	4						
	16	0	0	0	8		
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
INTL 3400	4	Co-op	0	Co-op	0	Vacation	0
ENGW 3315	4						
INTL elective	4						
Upper-division elective	4						
	16	0	0	0	0		
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
INTL elective	4	INTL 4700	4				
INTL elective	4	Elective	4				
Upper-division elective	4	Upper-division elective	4				
Elective	4	Elective	4				
	16		16				

Total Hours: 130

**International Affairs with African Studies Concentration, BA**

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**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

**International Affairs Major Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
AFRS 1101	Introduction to African Studies	4
ANTH 1101	Peoples and Cultures	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>African Studies Regional Analysis Courses</b>		
Complete four of the following, at least two of which must be numbered 2000 or above:		16
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
HIST 1180	African History	
HIST 2390	Africa and the World in Early Times	
<b>Global Dynamics</b>		
Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	

INTL 5200	Political Economy: Interdisciplinary Perspectives
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

*Human Rights and Social Justice*

INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics or WMNS 2480 Women and World Politics
HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media or INTL 3300 Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

*Globalization*

INTL 2240	Global Population and Development
INTL 2480	Women and World Politics or WMNS 2480 Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
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 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility or INTB 1209 International Business and Global Social Responsibility
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media or INTL 3300 Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**Senior Seminar/Experiential Learning**

INTL 4700	Senior Capstone Seminar in International Affairs	4
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**International 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

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	AFRS 1101	4	Vacation		Vacation	
INTL 1101	4	HIST 2211	4				
ENGW 1111	4	POLS 1160	4				
ANTH 1101	4	Foreign Language Course	4				
Foreign Language Course	4						
		17		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115 or 1116	4	POLS 1155	4	Vacation		Co-op	
INTL 2718	4	POLS 1156	0				
Elective	4	Elective	4				
Foreign Language Course	4	Elective	4				
		Foreign Language Course	4				
		EESH 2000	1				
		16		17		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective	4	Co-op	
		ENGW 3315	4	Elective	4		
		Elective	4				
		Elective	4				
		0		16		8	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0		16		8	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		INTL 4700	4
		Elective	4
		Elective	4
		Elective	4
		0	

Total Hours: 130

**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**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

**International Affairs Major Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics or regional analysis requirements. See department for additional courses.



Code	Title	Hours
<b>Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
ASNS 1150	East Asian Studies	4
or HIST 1150	East Asian Studies	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Asian Studies Regional Analysis Courses</b>		
Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.		
Complete four of the following, at least two of which must be numbered 2000 or above:		16
ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
HIST 2360	History of Capitalism in East Asia	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	
<b>Global Dynamics</b>		
Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 4630	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 4918	Model NATO	
<i>Globalization</i>		
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
ECON 3290	History of the Global Economy	
ECON 4635	International Economics	
ENGL 2450	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
SOCL 3465	Globalization and the Evolution of Human Societies

**Population, Migration, and Diaspora**

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
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**

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
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

**Senior Seminar/Experiential Learning**

INTL 4700	Senior Capstone Seminar in International Affairs	4
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**International Experience in Asia**

Complete at least one “international semester” via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval).

**Foreign Language Requirement**

Complete language coursework in Chinese or Japanese through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

**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

**Plan of Study  
Five Years, Three Co-ops in Summer 2/Fall**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
INTL 1000	1	HIST 2211	4	Vacation		Vacation
INTL 1101	4	POLS 1160	4			
ENGW 1111	4	ASNS 1150 or HIST 1150	4			
Foreign Language Course	4	Foreign Language Course	4			
ANTH 1101	4					
		17		16		0
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ECON 1115 or 1116	4	POLS 1155 and POLS 1156	4	Vacation		Co-op
INTL 2718	4	Elective	4			
Elective	4	Foreign Language Course	4			
Foreign Language Course	4	Elective	4			
		EESH 2000	1			
		16		17		0
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		INTL 3400	4	Elective	4	Co-op
		ENGW 3315	4	Elective	4	
		Elective	4			
		Elective	4			
		0		16		8
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		Elective	4	Elective	4	Co-op
		Elective	4	Elective	4	
		Elective	4			
		Elective	4			
		0		16		8
0						

**Year 5**

Fall	Hours	Spring	Hours
Co-op		INTL 4700	4
		Elective	4
		Elective	4
		Elective	4
	0		16

Total Hours: 130

**International Affairs with European Studies Concentration, BA**

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**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

*Note:* Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

**International Affairs Major Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
INTL 1101	Globalization and International Affairs	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
HIST 2211	The World Since 1945	4

or HIST 2311	Colonialism/Imperialism	
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 3435	Politics and Governance of Europe and the European Union	4

**European Studies Regional Analysis Courses**

Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.

Complete four of the following, at least two of which must be numbered 2000 or above: 16

CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
ECON 1293	European Economic History	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2376	Britain and the British Empire	
HIST 4946	Independent Field Research Abroad: Central Europe	
POLS 3435	Politics and Governance of Europe and the European Union	

**Global Dynamics**

Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4

<i>Environment</i>	
INTL 5100	Climate and Development
ENVR 1110	Global Climate Change
ENVR 2515	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 3409	Global Governance
POLS 4910	Model United Nations

*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
HIST 2373	Gender and Sexuality in World History

LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media
<b>Senior Seminar/Experiential Learning</b>	
INTL 4700	Senior Capstone Seminar in International Affairs
<b>International Experience in Europe</b>	
Complete at least one “international semester” via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval). If they do not complete an international semester, they must participate in either Model European Union or Model NATO.	
<b>Foreign Language Requirement</b>	
Complete language coursework in French, German, Greek, Italian, Portuguese, or Spanish through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.	
<b>International Affairs Major Credit/GPA Requirement</b>	
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

### Plan of Study

#### Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	HIST 2211	4	Vacation		Vacation	
INTL 1101	4	POLS 1160	4				
ENGW 1111	4	Foreign Language Course	4				
ANTH 1101	4	ECON 1115 or 1116	4				
Foreign Language Course	4						
		17			16		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	POLS 3435	4	Vacation		Co-op	
POLS 1156	0	Foreign Language Course	4				
INTL 2718	4	Elective	4				
Elective	4	Elective	4				
Foreign language course	4	EESH 2000	1				
		16			17		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective	4	Co-op	
		ENGW 3315	4	Elective	4		
		Elective	4				
		Elective	4				
		0			16		
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0			16		
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 4700	4				
		Elective	4				
		Elective	4				

Elective	4
0	16

Total Hours: 130

### 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

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

Note: Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

### International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ANTH 1101	Peoples and Cultures	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
LACS 1220	Latino, Latin American, and Caribbean Studies	4
POLS 1155	Comparative Politics	4

POLS 1160 International Relations 4

### Latin American Studies Regional Analysis Courses

Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.

Complete four of the following, at least two of which must be numbered 2000 or above: 16

ANTH 4500 Latin American Society and Development

or INTL 4500 Latin American Society and Development

CLTR 1240 Latin American Film

CLTR 1261 Caribbean Literature and Culture

CLTR 1505 Latin American Culture, History, and Politics

CLTR 3715 New Narratives: Latin America after 1989

CLTR 3720 Literature, Arts, and Poverty in Latin America

CLTR 4655 Latin American Literature

HIST 1187 Introduction to Latin American History

HIST 2025 Latin American History through Film

LACS 1220 Latino, Latin American, and Caribbean Studies

### Global Dynamics

Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4

#### Environment

ENVR 1110 Global Climate Change

ENVR 2515 Sustainable Development

INTL 5100 Climate and Development

SOCL 1246 Environment and Society

#### Law, Diplomacy, and Global Governance

COMM 2303 Global and Intercultural Communication

INTL 2480 Women and World Politics

or WMNS 2480 Women and World Politics

INTL 5200 Political Economy: Interdisciplinary Perspectives

POLS 1155 Comparative Politics

POLS 1160 International Relations

POLS 2370 Religion and Politics

POLS 3405 International Political Economy

POLS 3406 International Law

POLS 3409 Global Governance

POLS 4910 Model United Nations

#### Human Rights and Social Justice

HIST 2373 Gender and Sexuality in World History

INTL 2400 Politics of Islam and Gender

INTL 2480 Women and World Politics

or WMNS 2480 Women and World Politics

LPSC 2302 Global Human Rights: A Social and Economic Perspective

PHIL 5001 Global Justice

#### Conflict and Security

CRIM 4630 Political Crime and Terrorism

HIST 1206 Drug Trade and Drug War: History, Security, Culture

HIST 1389 History of Espionage 1: Antiquity to World War II

HIST 1390 History of Espionage 2: Cold War Spies

HIST 3330 The Global Cold War

HIST 3334 Assassinations in World History

HIST 3335 History of Modern Terrorism

JRNL 3300 Covering Conflicts: Peace, War, and the Media

or INTL 3300 Covering Conflicts: Peace, War, and the Media

PHIL 5001 Global Justice

POLS 2282 The Holocaust and Comparative Genocide

POLS 3408 International Security

POLS 3418 Nationalism

POLS 3420 U.S. National Security Policy

POLS 3423 Terrorism and Counterterrorism

POLS 3430 Revolution, Civil War, and Insurrection

POLS 4918 Model NATO

#### Globalization

INTL 2240 Global Population and Development

INTL 2480 Women and World Politics

or WMNS 2480 Women and World Politics

INTL 3200 Cities in a Global Context

INTL 5200 Political Economy: Interdisciplinary Perspectives

ANTH 2305 Global Markets and Local Culture

ANTH 2315 Religion and Modernity

ECON 3290 History of the Global Economy

ECON 4635 International Economics

ENGL 2450 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

SOCL 3465 Globalization and the Evolution of Human Societies

#### Population, Migration, and Diaspora

AFRS 3424 Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora

ANTH 1101 Peoples and Cultures

HIST 1218 Pirates, Planters, and Patriots: Making the Americas, 1492–1804

INTL 2240 Global Population and Development

INTL 2400 Politics of Islam and Gender

INTL 3200 Cities in a Global Context



PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
<b>Development</b>		
ANTH 2305	Global Markets and Local Culture	
ECON 1291	Development Economics	
ECON 3404	International Food Policy	
ENTR 2206	Global Social Enterprise	
ENVR 2515	Sustainable Development	
HIST 2011	Capitalism and Business: A Global History	
INTB 1203	International Business and Global Social Responsibility	
or INTB 1209	International Business and Global Social Responsibility	
INTL 2240	Global Population and Development	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
PHTH 5230	Global Health	
POLS 3487	Politics of Developing Nations	
<b>Communication and Media</b>		
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	
<b>Senior Seminar/Experiential Learning</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

**International Experience in Latin America**

Complete at least one “international semester” via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval).

**Foreign Language Requirement**

Complete language coursework in Portuguese or Spanish through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

**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

**Plan of Study**  
**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	LACS 1220	4	Vacation		Vacation	
INTL 1101	4	HIST 2211	4				
ENGW 1111	4	POLS 1160	4				
Foreign Language Course	4	Foreign Language Course	4				
ANTH 1101	4						
		17		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115 or 1116	4	POLS 1155	4	Vacation		Co-op	
INTL 2718	4	POLS 1156	0				
Elective	4	Elective	4				
Foreign Language Course	4	Foreign Language Course	4				
		Elective		4			
		EESH 2000		1			
		16		17		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective		4	Co-op
		ENGW 3315		4		4	
		Elective		4			
		Elective		4			
		0		16		8	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective		4	Co-op
		Elective		4		4	
		Elective		4			
		Elective		4			
		0		16		8	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		INTL 4700	4
		Elective	
		4	
		Elective	
		4	
		Elective	
		4	
		0	
		16	

Total Hours: 130

**International Affairs with 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 accomplished through diverse and cross-disciplinary theories

of interstate relations: conflict, cooperation, hierarchies; civil society, transnational advocacy networks, global social movements; and state-society relations: democracy, authoritarianism, inequalities, citizenship.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

*Note:* Students double majoring in international affairs and political science may only count two political science courses toward the international affairs major.

**International Affairs Major Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 1160	Middle East Studies	4
or HIST 1290	Modern Middle East	
INTL 2718	Research Methods in International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ANTH 1101	Peoples and Cultures	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>Middle East Regional Analysis Courses</b>		
Select courses taken during a study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.		
Complete four of the following, at least two of which must be numbered 2000 or above: <sup>1</sup>		16
INTL 1150	The Mediterranean World: An Overview	
INTL 1160	Middle East Studies	

INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

**Global Dynamics**

Complete one of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4

*Environment*

ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and 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 3409	Global Governance
POLS 4910	Model United Nations

*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
HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture

HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

<i>Development</i>		
INTL 2240	Global Population and Development	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
ANTH 2305	Global Markets and Local Culture	
ECON 1291	Development Economics	
ECON 3404	International Food Policy	
ENTR 2206	Global Social Enterprise	
ENVR 2515	Sustainable Development	
INTB 1203	International Business and Global Social Responsibility	
or INTB 1209	International Business and Global Social Responsibility	
HIST 2011	Capitalism and Business: A Global History	
PHTH 5230	Global Health	
POLS 3487	Politics of Developing Nations	
<i>Communication and Media</i>		
COMM 2303	Global and Intercultural Communication	
INTB 3310	Cultural Aspects of International Business	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
JRNL 5360	Global Reporting	
MSCR 2325	Global Media	
<b>Senior Seminar/Experiential Learning</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4
<b>International Experience in the Middle East</b>		
Complete at least one “international semester” via study abroad, international internship, two Dialogue of Civilizations programs, or international co-op. International students may be exempt from the semester abroad (subject to adviser approval). If they do not complete an international semester, they must either complete a Dialogue of Civilizations program, co-op, or internship or participate in Model United Nations or Model Arab League.		
<b>Foreign Language Requirement</b>		
Complete language coursework in Arabic or Hebrew through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.		
<sup>1</sup> Middle East Studies (INTL 1160) may not be used as a regional analysis course.		
<b>International Affairs Major Credit/GPA Requirement</b>		
Complete 60 semester hours in the major with a 2.000 GPA.		
<b>Upper-Division Electives</b>		
Complete three general electives numbered 3000 or above.		
<b>Program Requirement</b>		
128 total semester hours required		

## Plan of Study Five Years, Three Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	INTL 1160 or HIST 1290	4	Vacation		Vacation	
INTL 1101	4	HIST 2211	4				
ENGW 1111	4	Foreign Language Course	4				
ANTH 1101	4	POLS 1160	4				
Foreign Language Course	4						
		17	16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115 or 1116	4	POLS 1155	4	Vacation		Co-op	
INTL 2718	4	POLS 1156	0				
Foreign Language Course	4	Foreign Language Course	4				
Elective	4	Elective	4				
		Elective	4				
		EESH 2000	1				
		16	17		0		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective		4 Co-op	
		ENGW 3315	4	Elective		4	
		Elective	4				
		Elective	4				
		0	16		8		0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective		4 Co-op	
		Elective	4	Elective		4	
		Elective	4				
		Elective	4				
		0	16		8		0
Year 5							
Fall	Hours	Spring	Hours				
Co-op		INTL 4700	4				
		Elective	4				
		Elective	4				
		Elective	4				
		0	16				

Total Hours: 130

### Environmental Studies and International Affairs, BA

Through this combined major, successful undergraduates will develop an awareness of the international issues that influence the scientific,

cultural, societal, political, and economic aspects of the world's environmental problems and the ways in which such environmental challenges can be ameliorated and/or solved.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Environmental Studies Requirements

Code	Title	Hours
<b>Social Science Component</b>		
<i>Philosophy</i>		
PHIL 1180	Environmental Ethics	4
<i>Political Science</i>		
POLS 2395	Environmental Politics and Policy	4
<i>Sociology</i>		
SOCL 1246	Environment and Society	4
<b>Science Component</b>		
<i>Biology</i>		
BIOL 1141 or BIOL 1143	Microbes and Society Biology and Society	4
<i>Earth and Environmental Sciences</i>		
Complete one of the following:		4
ENVR 1110	Global Climate Change	
ENVR 1112	Environmental Geology	
ENVR 1200	Dynamic Earth	
<i>Environment</i>		
ENVR 1101	Environmental Science	4
<i>Quantitative Methods</i>		
Complete one of the following:		4-5
EEMB 5522	Experimental Design Marine Ecology	
ENVR 3300 and ENVR 3301	Geographic Information Systems and Lab for ENVR 3300	
ENVR 2330	Field Methods in Global Change	
INTL 2718	Research Methods in International Affairs	
MATH 2280	Statistics and Software	

*Planning*

ENVR 5210	Environmental Planning	4
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**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
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**Required Courses**

INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4

**International Affairs Elective**

Complete one of the following courses: 4

INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	

**Global Dynamics**

Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 8

*Environment*

ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	

*Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	

HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	
POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 4918	Model NATO	
POLS 3430	Revolution, Civil War, and Insurrection	

*Globalization*

ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
ECON 3290	History of the Global Economy	
ECON 4635	International Economics	
ENGL 2450	Postcolonial Literature	
HIST 2211	The World Since 1945	
HIST 2311	Colonialism/Imperialism	
INTB 3310	Cultural Aspects of International Business	
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
SOCL 3465	Globalization and the Evolution of Human Societies	

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
ANTH 1101	Peoples and Cultures	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
INTL 2240	Global Population and Development	
INTL 2400	Politics of Islam and Gender	
INTL 3200	Cities in a Global Context	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	

*Development*

ANTH 2305	Global Markets and Local Culture	
ECON 1291	Development Economics	

ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Communication and Media**

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 adviser. See department for additional courses.		8

**Africa**

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
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or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
INTL 4350	Ethnography of Southeast Asia
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

CLTR 1502	Introduction to Arabic Culture
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ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Courses**

Code	Title	Hours
<b>Integrative Courses</b>		
ECON 3423	Environmental Economics	4
or ECON 3290	History of the Global Economy	
ENVR 2515	Sustainable Development	4
HIST 2211	The World Since 1945	4
INTL 4700	Senior Capstone Seminar in International Affairs	4
or ENVS 4997	Senior Thesis	

**Environmental Studies and International Affairs 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
ENGW 1111	4	ENVR 1200, 1200, or 1110	4	Vacation	0	Vacation	0
ENVR 1101	4	PHIL 1180	4				

INTL 1101	4	POLS 1160	4				
SOCL 1246	4	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	4	Foreign language course	4				
INAF regional analysis 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	International experiential learning	16	Elective	4	Co-op	0
				Quantitative methods course	4-5		
	0		16		8-9		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ECON 3423	4	INAF global dynamics course 2	4	Co-op	0
		ENGW 3308 or 3315	4	Elective	4		
		ENVR 5210	4				
		INTL 3400	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	INTL 4700 or ENVS 4997	4
		ENVR 2515	4
		ENVR undergraduate elective	4
		INAF global dynamics course 3	4
	0		16

Total Hours: 129-130

**Human Services and International Affairs, BA**

The combined human services and international affairs degree offers students an understanding of geopolitical realities paired with the practical skills and theory necessary to work in social services and non governmental organizations (NGOs) impacted by global issues. Students will have the opportunity to prepare for practice in international NGOs through co-ops and Dialogue of Civilization programs. This combined major will prepare students for positions within the nonprofit sector with an international focus.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Human Services Requirements**

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 2970 or INTL 2718	Research Methods for Human Services Research Methods in International Affairs	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services Electives</b>		
Complete three HUSV courses.		12

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ECON 1115	Principles of Macroeconomics	4

- or ECON 1116 Principles of Microeconomics
- or HIST 2211 The World Since 1945
- or HIST 2311 Colonialism/Imperialism

**International Affairs Elective**  
Complete one of the following courses: 4

INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives

**Global Dynamics**  
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4

*Environment*

ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
SOCL 1246	Environment and Society

*Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2400	Politics of Islam and Gender
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice

POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENVR 2515	Sustainable Development
ENTR 2206	Global Social Enterprise
HIST 2011	Capitalism and Business: A Global History
INTL 2240	Global Population and Development
INTL 5100	Climate and Development

INTL 5200	Political Economy: Interdisciplinary Perspectives
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
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 adviser. See department for additional courses:		12

<b>Africa</b>	
AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa
<b>Asia</b>	
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture

HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
INTL 4350	Ethnography of Southeast Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
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 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

**Human Services/International Affairs Integrative Courses**

Complete Senior Seminar in Human Services (HUSV 4700) or Senior Capstone Seminar in International Affairs (INTL 4700) or both. Note, however, that students wishing to take HUSV 4700 but not INTL 4700 must meet with an INTL adviser to obtain approval for a substitute INTL course. Similarly, students wishing to take INTL 4700 but not HUSV 4700 must meet with an HUSV adviser to obtain approval for a substitute HUSV course. Substitute courses (HUSV or INTL) must be upper-division courses and must relate to the combined major.

Code	Title	Hours
<b>Human Services</b>		
HUSV 4700	Senior Seminar in Human Services	4
<b>International Affairs</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

**Human Services and International Affairs Combined Major Credit Requirement**

Complete 84 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	Elective	4	Vacation	0	Vacation	0
INTL 1000	1	Foreign language core course	4				
INTL 1101	4	HUSV 2300	4				
HUSV 1101	4	ECON 3290	4				

HSVC elective	4					
	17	16	0	0		
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Elective	4	Elective	4	Vacation	0	Co-op
Foreign language core course	4	HUSV 2970	4			
INTL elective	4	HUSV 3900	4			
HSVC elective	4	INTL 3400	4			
		EESH 2000	1			
	16	17	0	0		
<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	Elective	4	Elective	4	Co-op
		INTL elective	4	INTL elective	4	
		HSVC elective	4			
		SOCL 3440	4			
	0	16	8	0		
<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	0	ENGW 3315	4	Elective	4	Co-op
		Elective	4	INTL elective	4	
		INTL elective	4			
		HUSV 4994	6			
	0	18	8	0		
<b>Year 5</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>			
Co-op	0	Elective	4			
		INTL elective	4			
		HUSV 4700	4			
		INTL 4700	4			
	0	16				

Total Hours: 132

### Five Years, Three Co-ops in Spring/Summer 1

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
ENGW 1111	4	Elective	4	Vacation	0	Vacation
INTL 1000	1	Foreign language core course	4			
INTL 1101	4	HUSV 2300	4			
HUSV 1101	4	ECON 3290	4			
HSVC elective	4					
	17	16	0	0		
<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Elective	4	Co-op	0	Co-op	0	Elective

Foreign language core course	4			INTL elective	4
HSVC elective	4				
HUSV 3900	4				
EESH 2000	1				
	17	0	0	0	8
<b>Year 3</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Elective	4	Co-op	0	Co-op	0
INTL elective	4			INTL elective	4
HUSV 2970	4				
HSVC elective	4				
	16	0	0	0	8
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
ENGW 3315	4	Co-op	0	Co-op	0
Elective	4				
INTL elective	4				
HUSV 4994	6				
	18	0	0	0	0
<b>Year 5</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>		
HSVC policy course	4	INTL elective	4		
SOCL 3440	4	Elective	4		
Elective	4	HUSV 4700	4		
INTL elective	4	INTL 4700	4		
	16	16			

Total Hours: 132

## BA-IACJ: International Affairs and Criminal Justice, BA

Through this combined major, successful undergraduates develop an awareness of crime and justice issues within their international, transnational, and global contexts since the early 20th century. The scope and sequence of international affairs courses provide students with a foundation in topics such as interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship). Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Upon graduation, students are equipped with the skills and knowledge needed to work across national cultures in fields that relate to understanding and addressing criminal behavior.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## International Affairs Requirements

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
ANTH 1101	Peoples and Cultures	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>International Affairs Elective</b>		
Complete one of the following:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4
<i>Environment</i>		
INTL 5100	Climate and Development	
ENVR 1110	Global Climate Change	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
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 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		

INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
INTL 3300	Covering Conflicts: Peace, War, and the Media
or JRNL 3300	Covering Conflicts: Peace, War, and the Media
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War. History, Security, Culture
HIST 1390	History of Espionage 2: Cold War Spies
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
PHIL 5001	Global Justice
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
INTL 3200	Cities in a Global Context
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context



AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
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
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
JRNL 5360	Global Reporting
INTL 3300	Covering Conflicts: Peace, War, and the Media
or JRNL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media
<b>International Experiential Learning</b>	
Complete at least one “international semester” via study abroad, international internship, international co-op, or two short-term programs.	
<b>Regional Analysis Requirement</b>	
Complete two of the following, both of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:	
<b>Africa</b>	
AFRS 2307	Africa Today
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
AFRS 2900	Swahili, Culture, and Politics in Kenya
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or 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
ENTR 3308	Business Economic History of South Africa
INTL 4510	Anthropology of Africa
or 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
<b>Asia</b>	
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism
<b>Europe</b>	
CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union
<b>Latin America</b>	
INTL 4500	Latin American Society and Development
or ANTH 4500	Latin American Society and Development
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 3715	New Narratives: Latin America after 1989

CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
HIST 1185	Introduction to Middle Eastern History
ECON 1292	Economic History of the Middle East
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. Note: Completing this requirement satisfies the language requirement for the BA degree.

**Criminal Justice Requirements**

Code	Title	Hours
<b>Introduction to Crime, Law, and the Justice System</b>		
What do we know about crime and justice? In these three courses, students have an opportunity to develop a foundational understanding of three related phenomena: why crime exists, how our criminal justice system responds to crime, and the constitutional and legal oversight of this process.		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4

**Current Crime and Justice Issues**

These courses introduce students to topical issues related to crime and justice.

Complete one of the following:		4
CRIM 1300	The Death Penalty	

CRIM 1400	Human Trafficking
CRIM 1500	Corruption, Integrity, and Accountability
CRIM 1700	Crime, Media, and Politics

**Understanding and Experiencing Criminal Justice Institutions and Systems**

How does justice work and for whom? These courses introduce students to the systems and institutions tasked with providing justice. Each includes experiential learning components in cooperation with local criminal justice institutions.

Complete one of the following: 4

CRIM 2310	Courts: The Third Branch of Government
CRIM 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

**Creating Knowledge about Crime and Justice**

How do we know what we know about crime and justice—and how do we develop new knowledge? Harnessing data to learn about issues, identify solutions, and advocate for change.

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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**Crime Problems**

The following courses provide students a deeper look at a range of crime problems.

Complete one of the following: 4

CRIM 3010	Criminal Violence
CRIM 3040	Psychology of Crime
CRIM 3050	Organized Crime
CRIM 3070	Corporate and White-Collar Crime
CRIM 3540	Addiction and Recovery
CRIM 4630	Political Crime and Terrorism

**Systemic Issues**

A consideration of systemic issues facing the criminal justice system.

Complete one of the following: 4

CRIM 4010	Gender, Crime, and Justice
CRIM 4020	Race, Crime, and Justice

**Solutions and Reform**

How do we reinvent criminal justice institutions and their practice? Courses are project-based and solution-oriented, drawing on knowledge gained in the classroom and through co-op and other experiences.

Complete one of the following: 4

CRIM 4040	Crime Prevention
CRIM 4120	Courts and Sentencing
CRIM 4300	Community-Based Corrections
CRIM 4500	Police Strategy

### Introduction and Methods Options

Code	Title	Hours
<b>Introduction</b>		
Complete one of the following:		1
INTL 1000	International Affairs at Northeastern	
CRIM 1000	Criminal Justice at Northeastern	
<b>Research Methods</b>		
Complete one of the following:		4
INTL 2718	Research Methods in International Affairs	
CRIM 3600	Criminal Justice Research Methods	

### Supporting Courses

Code	Title	Hours
<b>Computer or Data Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	
DS 2000	Programming with Data	
<b>Co-op Integration Requirements</b>		
Complete before the first co-op:		1
EESH 2000	Professional Development for Co-op	
Complete after the first co-op:		1
CRIM 3000	Co-op Integration Seminar 2	
Complete after the second co-op:		1
CRIM 4000	Co-op Integration Seminar 3	

### Integrative Requirement

Code	Title	Hours
<b>Integrative Course and Capstone</b>		
CRIM 3030	Global Criminology	4
INTL 4700	Senior Capstone Seminar in International Affairs	4
or CRIM 4949	Senior Capstone Seminar	

### Combined-Major Credit Requirement

Complete 84 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, Two Co-ops Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000 or CRIM 1000	1	ANTH 1101, HIST 2211, or HIST 2311	4	Elective	4	Elective (Dialogue of Civilizations possible)	4
INTL 1101	4	ECON 1115 or 1116	4	Elective	4	Elective (Dialogue of Civilizations possible)	4
ENGW 1111	4	CRIM thematic elective	4				
CRIM 1100	4	Foreign language course	4				

Foreign language course	4						
	17	16	8				8
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
POLS 1155	4	Co-op		Co-op		CRIM elective	4
CRIM 2100	4					INTL elective	4
CRIM 2200	4						
Foreign language course	4						
EESH 2000	1						
	17	0	0				8
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
INTL 2718 or CRIM 3600	4	Co-op		Co-op		INTL elective (Dialogue of Civilizations possible)	4
INTL 3400	4					Elective (Dialogue of Civilizations possible)	4
Foreign language course	4						
CRIM 1700	4						
CRIM 3000	1						
	17	0	0				8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CRIM 3030	4	INTL 4700 or CRIM 4949	4				
CRIM 3700	4	INTL elective	4				
CRIM elective	4	CRIM elective	4				
INTL elective	4	CRIM elective	4				
CRIM 4000	1						
	17	16					

Total Hours: 132

## International Affairs and Cultural Anthropology, BA

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 state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses

where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ECON 1115	Principles of Macroeconomics	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
<b>International Affairs Elective</b>		
Please choose one of the following:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	

POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations
<i>Human Rights and Social Justice</i>	
HIST 2373	Gender and Sexuality in World History
INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics

POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 regional analysis courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:	8

Africa	
AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

Latin America	
ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

Middle East	
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

Russia	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

### International Affairs Foreign Language Requirement

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

### Anthropology Major Requirements

*Note:* At least nine anthropology courses must be taken to complete the International Affairs and Cultural Anthropology program.

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4

ANTH 3421	Foundations of Anthropological Theory	4
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**Anthropology Electives**  
 Complete three courses in the following range, one of which must be numbered 4000 or above. One study-abroad course may also count toward this requirement with prior permission from the department:

ANTH 2300 to ANTH 4999		
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**Advanced Area Courses**  
 Complete two of the following: 8

ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Integrative Requirements

*Note:* If International Affairs courses are taken in both the Research Methods and Capstone areas, then an additional Anthropology Elective is required.

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or ANTH 3410	Ethnographic Field Experience	
<b>Global Markets</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
ANTH 4600	Senior Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

Students taking Senior Seminar (ANTH 4600) must complete either a one-semester senior project, which they would do in the context of ANTH 4600, or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

### Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### International Affairs and Anthropology Combined Major Credit Requirement

Complete 76 semester hours in the major.

### 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
INTL 1000	1	POLS 1160	4	Vacation	Vacation
INTL 1101	4	ECON 1115 or HIST 2211	4		
ENGW 1111	4	ANTH 2305	4		
ANTH 1101	4	Elective	4		



Foreign Language Core Course	4						
	17	16	0	0			

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 2718 or ANTH 3410	4	ANTH 3421	4	Vacation	4	Co-op	
Elective	4	Elective	4				
Elective	4	Elective	4				
Foreign Language Core Course	4	Elective	4				
	16	16	0	0			

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective	4	Co-op	
		ENGW 3315	4	Elective	4		
		Elective	4				
		Elective	4				
	0	16	8	0			

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
	0	16	8	0			

**Year 5**

Fall	Hours	Spring	Hours
Co-op		INTL 4700 or ANTH 4600	4
		Elective	4
		Elective	4
		Elective	4
	0	16	

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation	4	Vacation	
INTL 1101	4	ECON 1115 or HIST 2211	4				
ENGW 1111	4	ANTH 2305	4				
ANTH 1101	4	Elective	4				
Foreign Language Core Course	4						
	17	16	0	0			

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 2718 or ANTH 3410	4	Co-op	4	Co-op	4	Vacation	

ANTH 3421	4
Elective	4
Foreign Language Core Course	4

	16	0	0	0
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**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op	4	Co-op	4	Elective	4
ENGW 3315	4					Elective	4
Elective	4						
Elective	4						
	16	0	0	0			8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	4	Co-op	4	Elective	4
Elective	4					Elective	4
Elective	4						
Elective	4						
	16	0	0	0			8

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	INTL 4700 or ANTH 4600	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16	16	

Total Hours: 129

**International Affairs and Economics, BA**

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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>International Affairs/Economics at Northeastern</b>		
INTL 1000 or ECON 1000	International Affairs at Northeastern Economics at Northeastern	1
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ANTH 1101 or HIST 2211 or HIST 2311	Peoples and Cultures The World Since 1945 Colonialism/Imperialism	4
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete two of the following with one course numbered 2000 or above. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		8
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2400	Politics of Islam and Gender
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300 or INTL 3300	Covering Conflicts: Peace, War, and the Media Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480 or WMNS 2480	Women and World Politics Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
<b>Development</b>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
ECON 3404	International Food Policy
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<b>Communication and Media</b>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### International 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:		12

#### Africa

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa

AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

#### Asia

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
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
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

#### Europe

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

#### Latin America

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1240	Latin American Film

CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

CLTR 1502	Introduction to Arabic Culture
ECON 1292	Economic History of the Middle East
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding 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.

**Economics Requirements**

Code	Title	Hours
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 3520	History of Economic Thought	4

**Economics Electives**

Code	Title	Hours
Complete 3 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, courses used to satisfy international affairs requirements, courses used to satisfy the integrative courses requirement, and ECON 3520 may not be used as Economics electives.		
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

**Supporting Courses**

Code	Title	Hours
<b>Calculus</b>		
MATH 1231	Calculus for Business and Economics	4
<b>Methods</b>		
CS 1100	Computer Science and Its Applications	4
or INTL 2718	Research Methods in International Affairs	
or MISM 2510	Fundamentals of Information Analytics	
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	

**Integrative Requirements**

Code	Title	Hours
<b>Development Economics</b>		
ECON 1291	Development Economics	4
<b>Senior Seminar</b>		
Complete one of the following with a thesis or project that integrates both international affairs and economics:		
ECON 4692	Senior Economics Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

**International Affairs and Economics Combined-Major GPA**

Grades in the following Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4

**International Affairs and Economics Combined-Major Credit Requirement**

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	MATH 1231	4	ECON elective 1	4	Elective	4
INTL 1101	4	ECON 1116	4	Elective	4	Elective	4

ECON 1115	4	POLS 1160	4
ENGW 1111	4	HIST 2211	4
Foreign language core course	4		
17		16	
		8	
8			

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1100	4	ECON 2350	4	ECON elective 2	4	Co-op	0
ECON 2315	4	INTL elective	4	Elective	4		
INTL elective	4	Foreign language core course	4				
Foreign language core course	4	ECON 2316	4				
16		16		8		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL 3400	4	Elective	4	Co-op	0
		Elective	4	INTL elective	4		
		ECON 3520	4				
		INTL Elective	4				
0		16		8		0	

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	ECON elective 3	4
		INTL elective	4
		Elective	4
		ECON 4692	4
		or INTL 4700	
0		16	

Total Hours: 129

## International Affairs and History, BA

Through this combined major, successful undergraduate students will develop a historically contingent awareness of global affairs and international policy issues since the early 20th century through diverse and cross-disciplinary theories of interstate relations, state-society relations, the future of democracy, the nature of citizenship and rights, the origins and conduct of war, the foundations of racial and ethnic conflict and tolerance, and poverty and prosperity. This combined major highlights the importance of understanding the intersection between global issues and local traditions and is designed to prepare students to be politically, culturally, historically, and linguistically sensitive to their interaction.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>International Affairs/History at Northeastern</b>		
INTL 1000	International Affairs at Northeastern	1
or HIST 1000	History at Northeastern	
<b>International Affairs Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ECON 1115	Principles of Macroeconomics	4
POLS 1160	International Relations	4
POLS 1155	Comparative Politics	4
or ANTH 1101	Peoples and Cultures	
<b>International Affairs Elective</b>		
Complete one of the following:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	

### Global Dynamics

Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements: 4

<i>Environment</i>		
ENVR 1110	Global Climate Change	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
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 3409	Global Governance
POLS 4910	Model United Nations
<i>Human Rights and Social Justice</i>	
INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1390	History of Espionage 2: Cold War Spies
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
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 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
INTL 3200	Cities in a Global Context
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
INTL 3200	Cities in a Global Context
ANTH 1101	Peoples and Cultures
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
<i>Development</i>	
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 of the following, both of which must be in the same region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:		8

**Africa**

AFRS 2307	Africa Today
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AFRS 2464	Natural Resources and Sustainable Development
or INTL 2464	Natural Resources and Sustainable Development
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
or INTL 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
<b>Asia</b>	
ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism
<b>Europe</b>	
CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union
<b>Latin America</b>	
ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development

CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
HIST 1185	Introduction to Middle Eastern History
ECON 1292	Economic History of the Middle East
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**History Major Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one course from HIST 1001 to HIST 1999 (excluding 1200/1201).		4
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4

HIST 1187	Introduction to Latin American History	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 2311	Colonialism/Imperialism	
HIST 2330	Colonial and Revolutionary America	

**Intermediate History Cluster**  
 Complete four history courses numbered 2000 or above (excluding 2301, 2302, and 2330). 16

**Advanced History**  
 Complete one history course at the 3000 level or above. 4

**International Affairs and History Integrative Requirements**

**Code Title Hours**  
 One course from the Research Methods and Capstone requirements must come from history.

**Research Methods**  
 Complete one of the following: 4 - 5

INTL 2718	Research Methods in International Affairs	
HIST 2301 and HIST 2302	The History Seminar and Historical Writing	

**Capstone**  
 INTL 4700 Senior Capstone Seminar in International Affairs 4  
 or HIST 4701 Capstone Seminar

**Integrative Course**  
 HIST 2011 Capitalism and Business: A Global History 4  
 or HIST 2311 Colonialism/Imperialism

**International Affairs and History Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Sample Four Years, Two Co-ops in Spring/Summer 1**

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
INTL 1000	1	POLS 1160	4	INTL elective	4	Elective	4	
INTL 1101	4	ENGW 1111	4	HIST elective	4	Elective	4	
HIST 1200	1	HIST elective	4					
HIST 1201	4	Foreign language course	4					
ECON 1115	4							
Foreign language course	4							
		18			16			8
								8

Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
POLS 1155	4	Co-op		Co-op		INTL elective	4	
INTL 2718	4					Elective	4	
HIST elective	4							
Foreign language course	4							
EESH 2000	1							
		17			0			0
								8

Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
INTL 3400	4	Co-op		Co-op		INTL elective	4	
Foreign language course	4					Elective	4	
HIST elective	4							
ENGW 3315	4							
		16			0			0
								8

Year 4					
Fall	Hours	Spring	Hours		
Integrative course	4	INTL 4700	4		
INTL elective	4	HIST elective	4		
HIST elective	4	HIST elective	4		
Elective	4	Elective	4		
		16			16

Total Hours: 131

**International Affairs and 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 cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social/religious movements; state-society relations (religion, democracy, authoritarianism, social justice and ethics, citizenship); comparative study of religious theology and praxis; and knowledge of particular religious traditions, including Buddhism, Christianity, Hinduism, Islam, and Judaism.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
POLS 1155	Comparative Politics	4
or ECON 1115	Principles of Macroeconomics	
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	

or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures

HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

**Development**

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Communication and Media**

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

Code	Title	Hours
AFRS 2307	Africa Today	8
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	

ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film

CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Religious Studies Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		<b>4</b>
PHIL 1110	Introduction to Religious Studies	
<b>Lived Religion Elective</b>		<b>4</b>
Complete one of the following courses that is not used to satisfy another requirement:		
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1280	Islam: Rituals, Traditions, and Debates	

PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2322	Responses to the Holocaust
PHIL 3410	Religion and Spirituality in the African Diaspora
PHIL 4545	Religion and Politics in South Asia

**Comparative Religion Elective****4**

Complete one of the following courses that is not used to satisfy another requirement:

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1410	From Vodou and the Rastas to Afro-Islam: African Religions in the Americas
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism

**Electives****24**

Complete six of the following courses, one of which must be 2000-level or above and two of which must be 3000-level or above, that is not used to satisfy another requirement:

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2322	Responses to the Holocaust

PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3410	Religion and Spirituality in the African Diaspora
PHIL 4390	Cults and Sects
PHIL 4395	Ramayana
PHIL 4545	Religion and Politics in South Asia
PHIL 4547	Seminar: Apocalypticism
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**International Affairs and Religious Studies Integrative Requirement**

Code	Title	Hours
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or PHIL 4606	Seminar: Theories and Methods in Religious Studies	
or PHIL 4903	Seminar in Religion	

**International Affairs and Religious Studies Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation		Vacation	
INTL 1101	4	Lived Religion Elective	4				
ENGW 1111	4	Elective	4				
Foreign Language Course	4	Elective	4				
PHIL 1110	4						
		17			16		
					0		
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative Religion Elective	4	Elective	4	Vacation		Co-op	
Elective	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16			16		
					0		
						0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective	4	Co-op	
		ENGW 3315	4	Elective	4		
		PHIL 2000 Level Elective	4				
		Elective	4				
		0			16		
					8		
						0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL 3000 Level Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0			16		
					8		
						0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		INTL 4700	4
		Research Method Course	4
		Elective	4
		Elective	4
		0	16

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation		Vacation	
INTL 1101	4	Lived Religion Elective	4				
ENGW 1111	4	Elective	4				
Foreign Language Course	4	Elective	4				
PHIL 1110	4						
		17			16		
					0		
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign Language Course	4	Co-op	4	Co-op	4	Elective	4
Comparative Religion Elective	4					Elective	4
Elective	4						
Elective	4						
		16			0		
					0		
						8	



**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3315	4	Co-op		Co-op		Elective	4
PHIL 2000	4					Elective	4
Level Elective							
Elective	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op		Co-op		Vacation	
PHIL 3000	4						
Level Elective							
Elective	4						
Elective	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	INTL 4700	4
Elective	4	Research Method Course	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

**Political Science and International Affairs, BA**

Through this combined major, successful undergraduates will develop an awareness of global affairs and international relations since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; political processes, institutions, and actors; and state-society relations (democracy, authoritarianism, inequalities, citizenship).

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives/Concentration for BA**

Complete four upper-division political science electives, or complete one of the following concentrations. If you are working toward a concentration, declare it with your adviser in order for it to be added to your record.

Code	Title	Hours
<b>Political Science Electives</b>		
Complete four political science courses at or above POLS 2000.		16

- American Political Institutions (p. 993)
- Campaigns and Elections (p. 993)
- Comparative Politics (p. 993)
- Identity, Culture, and Politics (p. 993)
- International Relations and Diplomacy (p. 993)
- Law and Legal Studies (p. 994)
- Public Policy (p. 994)
- Security Studies (p. 994)

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	

INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives

**Global Dynamics**

Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements. 4

*Environment*

ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
SOCL 1246	Environment and Society

*Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

*Human Rights and Social Justice*

INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

*Globalization*

ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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
		12

Complete three of the following, two of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

**Africa**

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia

INTL 4350	Ethnography of Southeast Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
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 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions

PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Requirements**

Code	Title	Hours
<b>Research Methods</b>		
POLS 2399	Research Methods in Political Science	4
or INTL 2718	Research Methods in International Affairs	
<b>Capstone</b>		
Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	
INTL 4700	Senior Capstone Seminar in International Affairs	

**Political Science and International Affairs Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8

POLS 2345	Urban Policies and Politics
POLS 2350	State and Local Politics
POLS 2355	Intergovernmental Relations
POLS 3310	Public Opinion, Voting, and Elections
POLS 3162	Local Campaigns and Elections
POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12

POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENGW 1111	4	HIST 2211	4	Vacation	0	Vacation
MATH 1215	4	POLS 1150	4			

POLS 1155	4	Foreign language core course	4			
INTL 1101	4	POLS 1160	4			
POLS 1000	1					
		17	16	0	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 3290	4	INTL undergraduate elective	4	Vacation	0	Co-op	0
POLS undergraduate elective	4	POLS 2400	4				
POLS Thought course	4	POLS undergraduate elective	4				
Foreign language core course	4	Foreign language core course	4				
		16	16	0	0	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL 3400	4	INTL undergraduate elective	4	Co-op	0
		POLS undergraduate elective	4	POLS undergraduate elective	4		
		INTL undergraduate elective	4				
		ENGW 3315	4				
		0	16	8	0	0	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL undergraduate elective	4	Elective	4	Co-op	0
		INTL undergraduate elective	4	Elective	4		
		POLS undergraduate elective	4				
		Elective	4				
		0	16	8	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	INTL 4700	4
		Elective	4
		Elective	4
		Elective	4
		0	16

Total Hours: 129

### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	HIST 2211	4	Vacation	0	Vacation	0
MATH 1215	4	Foreign language core course	4				
POLS 1155	4	POLS 1150	4				
INTL 1101	4	POLS 1160	4				
POLS 1000	1						
	17		16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 3290	4	Co-op	0	Co-op	0	POLS undergraduate elective	4
Foreign language core course	4					INTL undergraduate elective	4
POLS Thought course	4						
POLS undergraduate elective	4						
	16		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL undergraduate elective	4	Co-op	0	Co-op	0	INTL undergraduate elective	4
POLS 2400	4					POLS undergraduate elective	4
POLS undergraduate elective	4						
Foreign language core course	4						
	16		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op	0	Co-op	0	Vacation	0
POLS undergraduate elective	4						
INTL undergraduate elective	4						
ENGW 3315	4						
	16		0		0		0
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL undergraduate elective	4	INTL 4700	4				

POLS undergraduate elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

### Sociology and International Affairs, BA

Through this combined major, successful undergraduates develop an awareness of societies within their international, transnational, and global contexts since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

#### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

#### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
ANTH 2305	Global Markets and Local Culture	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321 or INTL 2718	Research Methods in Sociology Research Methods in International Affairs	4

#### Sociology Electives A

Complete two courses in the following range: SOCL 1000 to SOCL 2999	8
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#### Sociology Electives B

Complete two courses in the following range: SOCL 3000 to SOCL 5999	8
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#### Capstone Requirement



SOCL 4600	Senior Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

### International Affairs Major Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete one of the following courses:		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 4630	Political Crime and Terrorism	

HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context

PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
<b>Development</b>		
ANTH 2305	Global Markets and Local Culture	
ECON 1291	Development Economics	
ECON 3404	International Food Policy	
ENTR 2206	Global Social Enterprise	
ENVR 2515	Sustainable Development	
HIST 2011	Capitalism and Business: A Global History	
INTB 1203	International Business and Global Social Responsibility	
or INTB 1209	International Business and Global Social Responsibility	
INTL 2240	Global Population and Development	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
PHTH 5230	Global Health	
POLS 3487	Politics of Developing Nations	
<b>Communication and Media</b>		
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	
<b>Senior Seminar/Experiential Learning</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

### International Experiential Learning

Complete at least one 'international semester' via study abroad, international internship, international co-op, or two approved short-term programs abroad.

### Regional Analysis Requirement

Code	Title	Hours
Complete two of the following courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.		8

#### Africa

AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
HIST 1180	African History	

HIST 2390	Africa and the World in Early Times	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	

#### Asia

ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
INTL 4350	Ethnography of Southeast Asia	
or ANTH 4350	Ethnography of Southeast Asia	
CLTR 1500	Modern Chinese History and Culture	
CLTR 1506	Introduction to Chinese Popular Culture	
CLTR 1700	Introduction to Japanese Pop Culture	
HIST 1246	World War II in the Pacific	
HIST 1252	Japanese Literature and Culture	
HIST 1253	History of Vietnam Wars	
HIST 1500	Modern Chinese History and Culture	
HIST 2308	Law, Justice, and Society in Modern China	
HIST 2351	Modern Japan	
HIST 2360	History of Capitalism in East Asia	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	

#### Europe

CLTR 1501	Introduction to French Culture	
CLTR 1503	Introduction to Italian Culture	
CLTR 1504	Cultural History of Spain	
ECON 1293	European Economic History	
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2370	Renaissance to Enlightenment	
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain	
HIST 2376	Britain and the British Empire	
HIST 4946	Independent Field Research Abroad: Central Europe	
POLS 3435	Politics and Governance of Europe and the European Union	

#### Latin America

ANTH 4500	Latin American Society and Development	
or INTL 4500	Latin American Society and Development	
CLTR 1261	Caribbean Literature and Culture	
CLTR 1505	Latin American Culture, History, and Politics	
CLTR 1240	Latin American Film	
CLTR 3715	New Narratives: Latin America after 1989	

CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Requirements**

Code	Title	Hours
SOCL 3465	Globalization and the Evolution of Human Societies	4

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Sociology and International Affairs Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 1000	1	ANTH 1101	4	Vacation		Vacation	
SOCL 1101	4	ENGW 1111	4				
INTL 1101	4	POLS 1160	4				
HIST 2211 or ECON 1115	4	Elective	4				
Foreign Language Course		4					
		17		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 3300	4	POLS 1155	4	Vacation		Co-op	
SOCL 2320	4	POLS 1156	0				
Elective	4	SOCL 2321 or INTL 2718	4				
Foreign Language Course	4	ANTH 2305	4				
		Elective		4			
		16		16		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		SOCL 3465	4	Elective	4	Co-op	
		INTL 3400	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		0		16		8	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0		16		8	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		SOCL 4600 or INTL 4700	4
		Elective	4
		Elective	4
		Elective	4
		0	

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 1000	1	ANTH 1101	4	Vacation		Vacation	
SOCL 1101	4	ENGW 1111	4				

INTL 1101	4	POLS 1160	4
HIST 2211 or ECON 1115	4	Elective	4
Foreign Language Course	4		
	17	16	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 3300	4	Co-op		Co-op		Elective	4
SOCL 2320	4					Elective	4
Foreign Language Course	4						
Elective	4						
	16		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	Co-op		Co-op		Elective	4
POLS 1156	0					Elective	4
SOCL 2321 or INTL 2718	4						
ANTH 2305	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 3465	4	Co-op		Co-op		Vacation	
INTL 3400	4						
ENGW 3315	4						
Elective	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	SOCL 4600 or INTL 4700	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

**Spanish and International Affairs, BA**

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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Spanish Language Requirements**

Code	Title	Hours
<b>Spanish Language Requirements</b>		
SPNS 2101	Intermediate Spanish 1	4
SPNS 2102	Intermediate Spanish 2	4
SPNS 3101	Advanced Spanish 1	4
<b>Spanish Culture</b>		
Complete one of the following courses:		4
CLTR 1504	Cultural History of Spain	
CLTR 1505	Latin American Culture, History, and Politics	
<b>Spanish Literature</b>		
Complete one of the following courses:		4
CLTR 3710	Representing Latin American Cities	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 4655	Latin American Literature	
<b>Advanced Spanish Language</b>		
Complete two of the following courses in the appropriate language while on study abroad:		8
SPNS 2101 to SPNS 5999		
CLTR 3710	Representing Latin American Cities	
CLTR 3715	New Narratives: Latin America after 1989	
CLTR 3720	Literature, Arts, and Poverty in Latin America	
CLTR 3725	Representing Violence and Human Rights in Latin America	
CLTR 4655	Latin American Literature	

<b>Spanish Language Electives</b>		
Complete three of the following courses in the language of your major with course numbers 2990 or above:		12
SPNS 2990 to SPNS 3990		
CLTR 3710	Representing Latin American Cities	

CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 3725	Representing Violence and Human Rights in Latin America
CLTR 4655	Latin American Literature

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete two of the following courses. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		8
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	

<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
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 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender

INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

**Development**

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

**Communication and Media**

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 adviser. See department for additional courses:

Code	Title	Hours
<b>Africa</b>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
HIST 1180	African History	
HIST 2390	Africa and the World in Early Times	

INTL 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History



HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**Integrative Courses**

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4

**Spanish and International Affairs Combined-Major Credit/GPA Requirements**

Complete 84 semester hours in the major.

**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
INTL 1000	1	MATH 1215	4	Vacation	0
ENGW 1111	4	ECON 1115 or 1116	4		
INTL 1101	4	Elective	4		
CLTR 1120	4	SPNS 2102	4		

SPNS 2101	4				
	17		16		0

**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

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL elective	4	INTL elective	4	Co-op	0
		INTL elective	4	Upper division elective	4		

		Advanced literature/cultural course	4		
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		Advanced literature/cultural course	4		
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	0		16		8		0
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**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		
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	0		16		8		0
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**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	INTL 4700	4
		Upper division elective	4

		Spanish elective 3000-5000	4
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		CLTR 4655	4
	0		16

Total Hours: 125

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
INTL 1000	1	MATH 1215	4	Vacation	0
ENGW 1111	4	ECON 1115 or 1116	4		

INTL 1101	4	Elective	4			
CLTR 1120	4	SPNS 2202	4			
SPNS 2101	4					
	17		16	0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	INTL elective	4
Spanish elective 3000-5000	4					Elective	4
SPNS 3101	4						
	12		0	0			8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL elective	4	Co-op	0	Co-op	0	INTL elective	4
INTL elective	4					Upper division elective	4
Advanced literature/cultural course	4						
Advanced literature/cultural course	4						
	16		0	0			8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op	0	Co-op	0	Vacation	0
ENGW 3315	4						
Elective	4						
Spanish elective 3000-5000	4						
	16		0	0			0

**Year 5**

Fall	Hours	Spring	Hours
INTL elective	4	INTL elective	4
Upper division elective	4	INTL 4700	4
Elective	4	Upper division elective	4
Spanish elective 3000-5000	4	LITR 4655	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**

Complete two of the following. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser.

Code	Title	Hours
<b>Africa</b>		
AFRS 2307	Africa Today	
AFRS 2900	Swahili, Culture, and Politics in Kenya	
AFRS 3460	Contemporary Government and Politics in Africa	
AFRS 4939	Community Health, Culture, and Development in Kenya	
ANTH 4510	Anthropology of Africa	
ENTR 3308	Business Economic History of South Africa	
HIST 1180	African History	
HIST 2390	Africa and the World in Early Times	
INTL 2464	Natural Resources and Sustainable Development	
or AFRS 2464	Natural Resources and Sustainable Development	
INTL 2465	The Scope and Dynamics of Conflicts in Africa	
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa	

**Asia**

ASNS 1150	East Asian Studies	
or HIST 1150	East Asian Studies	
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	
INTL 4350	Ethnography of Southeast Asia	
or ANTH 4350	Ethnography of Southeast Asia	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 2395	Japanese Buddhism	

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1261	Caribbean Literature and Culture
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
HIST 2025	Latin American History through Film
CLTR 1240	Latin American Film
CLTR 1505	Latin American Culture, History, and Politics
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

CLTR 1502	Introduction to Arabic Culture
HIST 1185	Introduction to Middle Eastern History
ECON 1292	Economic History of the Middle East
HIST 1290	Modern Middle East
INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
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	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding 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: 8

**Environment**

INTL 5100	Climate and Development
ENVR 1110	Global Climate Change
ENVR 2515	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 4910	Model United Nations

**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
HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

**Conflict and Security**

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism

POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

**Globalization**

INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	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
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 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

**Development**

INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility

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

**GPA Requirement**

2.000 GPA required in the minor

**Middle East and Mediterranean Studies, Minor**

The minor in Middle East and Mediterranean studies is an inter- and cross-disciplinary program, drawing on courses from within the International Affairs Program as well as departments and units across the college. The program provides an in-depth study of the Middle East and North Africa (Arab world, Israel, Iran, and Turkey); its place within the broader Mediterranean region; and its relations with other world regions. As such, it seeks to enhance students' understanding of this culturally diverse and politically important region of the world. Students are encouraged to take advantage of the university's study-abroad and Dialogue of Civilizations programs (faculty-led summer programs) in Egypt, Morocco, Tunisia, Jordan, Turkey, Israel and Palestine, and other approved programs in the region.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
POLS 3465	Government and Politics in the Middle East	4
or POLS 3470	Arab-Israeli Conflict	
or INTL 3250	Democracy and Development in North Africa and the Mediterranean	
INTL 1150	The Mediterranean World: An Overview	4
INTL 1160	Middle East Studies	4
or HIST 1290	Modern Middle East	

**Elective Courses**

Elective courses may include courses taken as part of an approved study-abroad program. *Note: Courses used as required courses (above) may not be used as elective courses.*

Code	Title	Hours
Complete two of the following:		
ARAB 1301	Elementary Arabic Immersion 1	8
ARAB 1302	Elementary Arabic Immersion 2	
ARAB 2301	Intermediate Arabic Immersion 1	
ARAB 2302	Intermediate Arabic Immersion 2	
ARAB 3301	Advanced Arabic Immersion 1	
ARAB 3302	Advanced Arabic Immersion 2	

CLTR 1502	Introduction to Arabic Culture
HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

## GPA Requirement

2.000 GPA required in the minor

## Jewish Studies

Website (<http://www.northeastern.edu/jewishstudies/>)

### Lori H. Lefkowitz, 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 cross-cultural and comparative study. Jewish studies is an interdisciplinary program embracing history, music, literature, political science, international affairs, sociology, gender studies, religion, philosophy, Hebrew, and more. The program also explores the evolving interactions between Judaism and other religions and offers exciting courses in both Israel studies and the history and cultures of Diaspora Jewish communities around the world. A wide range of elective courses is available through the relevant departments.

The Jewish studies program offers both a minor and a preapproved template for a combined major. A unique feature of the minor is the Jewish studies module, in which students create an original project that brings an aspect of Jewish studies together with an aspect of their major field.

Jewish studies classes seek to help students develop a more critical and analytical understanding of the religious and secular world around them. They are designed to prepare students for any field that requires critical thinking and cross-cultural understanding, including careers in education, social services, politics, museums and archives, and Jewish communal organizations, as well as for graduate and professional studies.

Study abroad, either through the Dialogues of Civilization program in Israel, Germany, and/or Poland, or through traditional study-abroad

programs, is a significant aspect of Jewish studies. Experiential learning in the Jewish studies program includes these study-abroad opportunities, as well as internships or co-ops at organizations such as the Jewish Community Relations Council, Facing History and Ourselves, the Jewish Women's Archive, the Arava Institute, and the Israeli Consulate. The Ruderman merit-based scholarship supports selected Jewish studies majors and minors; the Gideon Klein award supports a student in research on music and the Holocaust.

For more information, visit the department website (<http://www.northeastern.edu/jewishstudies/>).

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## Preapproved 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. (<https://registrar.northeastern.edu/article/combined-majors/>)

Students may request admission to such a combined major via the Combined Major Approval form, 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. 30)." For template program requirements, visit the myNortheastern web portal (<https://my.northeastern.edu/>), click on the "Self-Service" tab, then on "My Degree Audit."

## Programs

### Bachelor of Arts

- Jewish Studies and Religion (p. 1006)

### Minor

- Jewish Studies (p. 1009)

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Jewish Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 1285	Jewish Religion and Culture	4
or JWSS 1285	Jewish Religion and Culture	
JWSS 4660	Jewish Studies Module	1
<b>Jewish Religion and Thought</b>		
PHIL 2322	Responses to the Holocaust	4
<b>Israel Studies</b>		
Complete one of the following:		4
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
INTL 2100	Modern Israel	
POLS 3470	Arab-Israeli Conflict	
<b>Jewish History</b>		
Complete one of the following:		4
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 2285	America and the Holocaust	
or JWSS 2285	America and the Holocaust	
HIST 2431	Immigration and Identity in the American Jewish Experience	
or JWSS 2431	Immigration and Identity in the American Jewish Experience	
<b>Jewish Art and Culture</b>		
Complete one of the following:		4
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Jewish Studies Electives</b>		

Complete three of the following: 12

ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2282	The Holocaust and Comparative Genocide
HIST 2285	America and the Holocaust
or JWSS 2285	America and the Holocaust
HIST 2431	Immigration and Identity in the American Jewish Experience
or JWSS 2431	Immigration and Identity in the American Jewish Experience
INTL 2100	Modern Israel
JWSS 4992	Directed Study
PHIL 1120	Understanding the Bible
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
POLS 2370	Religion and Politics
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
SOCL 1241	Violence and Society
SOCL 2270	Race and Ethnic Relations

### Religion Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2322	Responses to the Holocaust	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3410	Religion and Spirituality in the African Diaspora	



PHIL 4390	Cults and Sects
PHIL 4545	Religion and Politics in South Asia
<b>Comparative Religion Elective</b>	
Complete one of the following courses that is not used to satisfy another requirement: 4	
PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

<b>Electives</b>	
Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement: 20	
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2322	Responses to the Holocaust
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3410	Religion and Spirituality in the African Diaspora
PHIL 4390	Cults and Sects
PHIL 4545	Religion and Politics in South Asia
PHIL 4606	Seminar: Theories and Methods in Religious Studies

PHIL 4903	Seminar in Religion
<b>Capstone</b>	
Complete one of the following courses that is not used to satisfy another requirement: 4	
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

<b>Integrative Requirements</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
Complete one of the following courses that is not used to satisfy another requirement: 4		
HIST/JWSS 1294	History of the Jews in the Modern World	
or JWSS 1294	History of the Jews in the Modern World	
HIST 2431	Immigration and Identity in the American Jewish Experience	
or JWSS 2431	Immigration and Identity in the American Jewish Experience	

<b>Hebrew Language Introduction</b>	
Complete two courses in Hebrew. These courses also count toward the BA language requirement. 8	

**Jewish Studies and Religion Major Credit Requirement**  
80 major semester hours required

**Program Requirement**  
128 total semester hours required

**Plan of Study**  
**Four Years, Two Co-ops in Spring/Summer 1**

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
ENGW 1111	4	Lived Religion Elective	4	Vacation	0	Elective	4
PHIL 1110	4	Israel Studies	4			Elective	4
PHIL 1285 or JWSS 1285	4	HBRW 1101	4				
Elective	4	PHIL 2322	4				
		16			16		
					0		
						8	

<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Elective	4	Co-op		Co-op	0	Elective	4
Jewish History Course	4					JS Elective	4
Comparative Religion Elective	4						
HBRW 1102	4						
		16			0		
					0		
						8	

<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
PHIL 2000 Level Elective	4	Elective	4	Elective	4	Elective	4

Jewish Art and Culture Course	4	JWSS 4660	1	Elective	4	Elective	4
Elective	4	Elective					
JS Elective	4	JS Elective	4				
	16		9		8		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 3000 Level Elective	4	Co-op		Co-op		Elective	4
Elective	4					Elective	4
Intergrative Requirement Course	4						
PHIL Capstone	4						
	16		0		0		8

Total Hours: 129

## Jewish Studies, Minor

The Jewish studies minor provides an excellent broad-based introduction to the history, religion, and cultures of the Jewish people while also offering a unique opportunity to bring students' major fields of study to bear on Jewish studies topics. In our innovative 1-credit capstone Jewish studies module, minors integrate their work in Jewish studies into their major field—for example, bringing together Jewish studies and psychology through a service-learning project with Gateways, a nonprofit that offers Jewish educational resources for children with special needs, or combining Jewish studies and history through a research project on the role of Jewish women in the women's health movement.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
PHIL 1285 or JWSS 1285	Jewish Religion and Culture	4
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:		16

Jewish Studies Courses	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)
ENGL 3678 or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity

ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
HBRW 1101	Elementary Hebrew 1
HBRW 1102	Elementary Hebrew 2
HIST 2282	The Holocaust and Comparative Genocide
HIST 2285 or JWSS 2285	America and the Holocaust
HIST 2431 or JWSS 2431	Immigration and Identity in the American Jewish Experience
INTL 2100	Modern Israel
JWSS 4660	Jewish Studies Module
JWSS 4992	Directed Study
POLS 3470	Arab-Israeli Conflict

### Jewish-Studies-Related Courses

HIST 2280	Hitler, Germany, and the Holocaust
JRNL 3300	Covering Conflicts: Peace, War, and the Media
POLS 2370	Religion and Politics
POLS 3465	Government and Politics in the Middle East
PHIL 1120	Understanding the Bible
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
SOCL 2270	Race and Ethnic Relations

### GPA Requirement

2.000 GPA required in the minor

## Philosophy and Religion

Website (<http://www.northeastern.edu/cssh/philosophy/>)

**Ronald Sandler, PhD**  
Professor and Department Chair  
[r.sandler@northeastern.edu](mailto:r.sandler@northeastern.edu)

401 Renaissance Park  
1135 Tremont St.  
Boston, MA 02120  
617.373.3636

Philosophy addresses questions and theories related to morality, society, religion, and the natural and social sciences. Coursework in philosophy provides students with an understanding of the methods and traditions of philosophical thought, as well as with opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Through readings, discussion, and writing, students examine questions concerning the validity of moral judgments, political ideas, and scientific theories, as well as questions about values and policy in such areas as law, medicine, environment, and technology. Coursework in philosophy significantly strengthens study in other areas. The major emphasizes development of analytic, reasoning, and communication abilities, and it is designed to enable students to tailor it to their particular interests.

Religious studies offers students the opportunity to acquire an understanding of religious experience within its social, historical, literary, and political context. Courses in religious studies examine specific religious traditions such as Judaism, Islam, and Hinduism, and using a comparative approach they explore themes across faith traditions. The religious studies major at Northeastern emphasizes the lived religious experience, or how religion permeates and impacts people's lives through everything from politics and economics to fashion, relationships, and music. Through the major, students have the opportunity to study a range of religions and a variety of methods of understanding the key dimensions of religious life.

Information on experiential learning opportunities, student life, and department faculty can be found at the department website (<http://www.northeastern.edu/cssh/philosophy/>).

### Academic Progression Standards

A minimum cumulative grade-point average of 2.000 is required to remain in good standing in the major.

### The Philosophy Major

The department offers five ways to major in philosophy: the standard major, the concentration in law and ethics, the concentration in ethics, the concentration in formal methods (e.g., game theory, social choice theory, and logic), and the concentration in religious studies. More information on these can be found on the program page.

### 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. Students also have an opportunity to explore diverse methodological approaches to the study of religion.

### Combined Majors

The analytical and critical skills gained from the study of philosophy are a valuable complement to any other area of study. So, too, is having an understanding of the history of ideas and of alternative world views and value systems. For this reason, the department offers combined majors with political science, economics, physics, environmental studies, history, English, computer science, behavioral neuroscience, criminal justice, 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 Africana 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 (<https://registrar.northeastern.edu/article/combined-majors/>).

Students may request such a combined major via the Combined Major Approval form (<https://registrar.northeastern.edu/article/combined-majors/>), 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 (<https://registrar.northeastern.edu/article/combined-majors/>)."

For template program requirements, visit the myNortheastern web portal (<https://my.northeastern.edu/>), click on the "Self-Service" tab, then on "My Degree Audit."

### Minors

The Department of Philosophy and Religion offers minors in philosophy and religious studies, as well as popular minors in ethics and information ethics. Each of these minors is structured to be highly flexible and to complement study in other majors, while also providing depth of knowledge in philosophy, religion, and ethics. Information on these minors can be found on the program pages.

### Programs

#### Bachelor of Arts (BA)

- Philosophy (p. 1010)
- Religious Studies (p. 1017)
- English and Philosophy (p. 870)
- Environmental Studies and Philosophy (p. 646)
- History and Philosophy (p. 907)
- History and Religious Studies (p. 911)
- International Affairs and Religious Studies (p. 985)
- Jewish Studies and Religion (p. 1006)
- Media and Screen Studies and Philosophy (p. 161)
- Political Science and Philosophy (p. 1036)
- Religious Studies and Africana Studies (p. 801)

#### Bachelor of Science (BS)

- Philosophy (p. 1040)
- Behavioral Neuroscience and Philosophy (p. 569)
- Computer Science and Philosophy (p. 366)
- Criminal Justice and Philosophy (p. 786)
- Economics and Philosophy (p. 841)
- Physics and Philosophy (p. 717)
- Political Science and Philosophy (p. 1057)
- Politics, Philosophy, and Economics (p. 757)

### Minor

- Information Ethics (p. 1062)
- Philosophy (p. 1063)
- Religious Studies (p. 1063)
- Ethics (p. 1064)

### Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

### Philosophy, BA

Philosophy is a basic field of inquiry. Its range encompasses ideas and issues in every domain of human experience, and its methods apply to problems of an unlimited variety. The major in philosophy can develop not only philosophical skill and sophistication but also critical thinking and writing abilities that are readily applicable to pursuits in other academic areas, useful in careers far removed from philosophy, and valuable in

everyday social and personal life. The study of philosophy can profoundly affect both the thinking one does and the kind of person one is.

There are varieties of concentrations of the philosophy major that students may choose from in accordance with their own backgrounds and interests. These include:

- **Philosophy generalist**  
Offers students a maximum number of electives so they may choose in accordance with their own backgrounds and interests
- **Concentration in law and ethics**  
Focuses elective course work in the areas of law, social and political philosophy, and applied ethics
- **Concentration in ethics**  
  
Focuses elective course work in the areas of ethical theory, applied ethics, and social and political philosophy
- **Concentration in religious studies**  
Uses electives to explore a variety of both religious expressions and methods of inquiry
- **Concentration in formal methods**  
  
Focuses elective course work in areas of logic and formal methods.
- **Combined majors** in media and screen studies and philosophy, economics and philosophy, environmental studies and philosophy, political science and philosophy, English and philosophy, history and philosophy, computer science and philosophy, criminal justice and philosophy, and physics and philosophy
- **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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### Concentrations

Complete one of the following concentrations:

- Philosophy Generalist requirements (p. 1011)
- Concentration in Law and Ethics (p. 1011)
- Concentration in Ethics (p. 1013)

- Concentration in Religious Studies (p. 1013)
- Formal Methods

### 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
<i>Philosophy Required Courses</i>		
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
<i>Philosophy Advanced Elective/Seminar</i>		
Complete three of the following courses with one at the 4000 or 5000 level:		12
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

*Additional Electives*  
Complete three additional courses in philosophy and religion. 12

#### CONCENTRATION IN LAW AND ETHICS

Code	Title	Hours
<i>Philosophy Required Courses</i>		
PHIL 1115	Introduction to Logic	4

1012 Philosophy, BA

PHIL 2301	Philosophical Problems of Law and Justice	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<i>Philosophy Advanced Elective/Seminar</i>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
<i>Ethics-Related Electives</i>		
Complete two of the following (not used to fulfill another requirement):		8
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1170	Business Ethics	
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	Contemporary Religious Ethics	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	

PHIL 1290	Chinese Philosophy and Religion
PHIL 1300	Knowledge in a Digital World
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2001	Ethics and Evolutionary Games
PHIL 2016	The Philosophy and Ethics of Lying and Deception
PHIL 2143	Philosophy for Children
PHIL 2155	Human Rights
PHIL 2303	Social and Political Philosophy
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2395	Japanese Buddhism
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

*Law-Related Electives*

Complete two courses from social science departments. These courses are to be chosen in consultation with the department:		8
AFAM 2360	Politics of Poverty	
AFRS 3460	Contemporary Government and Politics in Africa	
CRIM 2100	Criminal Due Process	
CRIM 2200	Criminology	
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	Violence and Society	
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
<i>Philosophy Required Courses</i>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<i>Philosophy Advanced Elective/Seminar</i>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
<i>Ethics Courses</i>		
Complete four of the following (not used to fulfill another requirement):		16
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1170	Business Ethics	
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	Contemporary Religious Ethics	

PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1290	Chinese Philosophy and Religion
PHIL 1300	Knowledge in a Digital World
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2001	Ethics and Evolutionary Games
PHIL 2016	The Philosophy and Ethics of Lying and Deception
PHIL 2143	Philosophy for Children
PHIL 2155	Human Rights
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2303	Social and Political Philosophy
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2395	Japanese Buddhism
PHIL 4390	Cults and Sects
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**CONCENTRATION IN RELIGIOUS STUDIES**

Code	Title	Hours
<i>Philosophy Required Courses</i>		
PHIL 1110	Introduction to Religious Studies	4
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<i>Philosophy Advanced Elective/Seminar</i>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	



PHIL 5010	AI Ethics	
<i>Religious Studies Courses</i>		
Complete three of the following (not used to fulfill another requirement):		12
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1120	Understanding the Bible	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1666	The Problem of Evil in Film	
PHIL 2230	Music and Religion	
PHIL 2395	Japanese Buddhism	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	

**CONCENTRATION IN FORMAL METHODS**

Code	Title	Hours
<i>Philosophy Required Courses</i>		16
PHIL 1115	Introduction to Logic	
PHIL 2325	Ancient Philosophy and Political Thought	
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	
PHIL 4515	Advanced Logic	

*Formal Methods Courses* 16

Complete four of the following at least three of which must be PHIL (one of which must be 3000 or above)

CS 2800	Logic and Computation	
ECON 4681	Information Economics and Game Theory	
INSH 1500	Digital Methods for Social Sciences and Humanities	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
MATH 2280	Statistics and Software	
MATH 3081	Probability and Statistics	
PHIL 1105	Science and Pseudoscience	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1300	Knowledge in a Digital World	
PHIL 2001	Ethics and Evolutionary Games	

PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 2050	Information and Uncertainty	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
POLS 3310	Public Opinion, Voting, and Elections	

*Philosophy Electives* 8

Complete two other PHIL courses (not used to fulfill another requirement) at least one of which is at the 4000/ 5000 level

**Plan of Study**  
**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	PHIL undergraduate elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
		16			16		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language core course	4	Elective	4	Vacation	0	Co-op	0
Elective	4	PHIL 2330	4				
PHIL 2325	4	Elective	4				
Elective	4	PHIL undergraduate elective	4				
		EESH 2000	1				
		16			17		

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4	Elective	4	Co-op	0
		PHIL 1115	4	Elective	4		
		Advanced philosophy elective	4				
		ENGW 3315	4				
		0			16		

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4	Elective	4	Co-op	0
		Philosophy seminar	4	Upper-division elective	4		

PHIL undergraduate elective	4			
Upper-division elective	4			
	0	16	8	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	Elective	4
		PHIL undergraduate elective	4
		Upper-division elective	4
		Elective	4
	0		16

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	PHIL undergraduate elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
	16		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language core course	4	Co-op	0	Co-op	0	Elective	4
Elective	4					Elective	4
PHIL 2325	4						
Elective	4						
EESH 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
PHIL 2330	4					PHIL undergraduate elective	4
Upper-division elective	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Vacation	0
PHIL 1115	4						
Advanced philosophy elective	4						
ENGW 3315	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	Elective	4
Philosophy seminar	4	PHIL undergraduate elective	4
PHIL undergraduate elective	4	Upper-division elective	4
Upper-division elective	4	Elective	4
	16		16

Total Hours: 129

**Philosophy with Concentration in Law and Ethics, BA**

**FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Moral and political elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
	16		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language core course	4	Elective	4	Vacation	0	Co-op	0
Elective	4	PHIL 2330	4				
PHIL 2325	4	Elective	4				
Elective	4	Law-related elective	4				
		EESH 2000	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4	Elective	4	Co-op	0
		PHIL 1115	4	Elective	4		
		PHIL 3435	4				

1016 Philosophy, BA

ENGW 3315		4					
0		16	8		0		
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	Elective	4	Elective	4	Co-op	0
		Moral and political elective	4	Upper-division elective	4		
		Law-related elective	4				
		Upper-division elective	4				
0		16	8		0		
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op	0	Elective	4				
		Philosophy seminar	4				
		Upper-division elective	4				
		Elective	4				
0		16					

Total Hours: 129

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1**

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Moral and political elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
16		16	0		0		0
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Foreign language core course	4	Co-op	0	Co-op	0	Elective	4
Elective	4					Elective	4
PHIL 2325	4						
Elective	4						
EESH 2000	1						
17		0	0		8		8
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Elective	4	Co-op	0	Co-op	0	Elective	4
PHIL 2330	4					Elective	4
Law-related elective	4						

Upper-division elective		4					
16		0	0		8		
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Elective	4	Co-op	0	Co-op	0	Vacation	0
PHIL 1115	4						
PHIL 3435	4						
ENGW 3315	4						
16		0	0		0		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Elective	4	Elective	4				
Moral and political elective	4	Philosophy seminar	4				
Law-related elective	4	Upper-division elective	4				
Upper-division elective	4	Elective	4				
16		16					

Total Hours: 129

**Philosophy with Concentration in Religious Studies, BA**

**FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Religious studies elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
16		16	0		0		0
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Elective	4	Elective	4	Vacation	0	Co-op	0
Foreign language core course	4	PHIL 2330	4				
PHIL 2325	4	Elective	4				
Elective	4	Religious studies elective	4				
		EESH 2000	1				
16		17	0		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op	0	Elective	4	Elective	4	Co-op	0

PHIL 1115	4	Elective	4
PHIL 3435	4		
ENGW 3315	4		
	0	16	8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Elective	4	Elective	4	Co-op	0
		Philosophy elective	4	Upper-division elective	4		
		Upper-division elective	4				
		Elective	4				
	0	16	8	0			

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	Elective	4
		Religious studies seminar	4
		Upper-division elective	4
		Elective	4
	0	16	

Total Hours: 129

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Religious studies elective	4				
PHIL 1101	4	Foreign language core course	4				
Foreign language core course	4	Elective	4				
	16	16	0	0			

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language core course	4	Co-op	0	Co-op	0	Elective	4
Elective	4					Elective	4
PHIL 2325	4						
Elective	4						
EESH 2000	1						
	17	0	0	0			8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
PHIL 2330	4					Elective	4

Religious studies elective	4		
Upper-division elective	4		
	16	0	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Vacation	0
PHIL 1115	4						
PHIL 3435	4						
ENGW 3315	4						
	16	0	0	0			8

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	Elective	4
Philosophy seminar	4	Religious studies seminar	4
Upper-division elective	4	Upper-division elective	4
Elective	4	Elective	4
	16	16	

Total Hours: 129

**Religious Studies, BA**

The program in religious studies offers the opportunity to acquire an understanding of religion within various cultural, historical, and political contexts through comparative approaches and an engagement with religion in everyday life. The major in religious studies is designed to enable students to not only gain a breadth of knowledge across a variety of religious traditions but also to pursue in-depth mastery of particular traditions in their practical and cultural dimensions, including the various normative and ideological issues that arise out the manifestation of religion in human affairs. In addition to the study of particular religious traditions, religious studies majors will be expected to gain a general knowledge of the theoretical and methodological approaches employed in the academic study of religion. Through the major, a student will enhance the ability to think, interpret, and write critically about a range of religious traditions through diverse methodological approaches.

- **The standard religion major** offers students a maximum number of electives so they may choose in accordance with their own backgrounds and interests.
- **Combined majors** are offered in Jewish studies and religion, history and religious studies, religious studies and African-American studies, and international affairs and religious studies.
- **The half-major template** in religious studies can be used by students to create their own combined majors.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Religious Studies Major Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2322	Responses to the Holocaust	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3410	Religion and Spirituality in the African Diaspora	
PHIL 4390	Cults and Sects	
PHIL 4545	Religion and Politics in South Asia	
<b>Comparative Religion</b>		
Complete one of the following that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	

PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

### Electives

Complete five of the following, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:		20
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1285	Jewish Religion and Culture	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 2322	Responses to the Holocaust	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 4390	Cults and Sects	
PHIL 4545	Religion and Politics in South Asia	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	

### Capstone

Complete one of the following that is not used to satisfy another requirement:		4
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	

### Religious Studies Major Credit Requirement

Complete 36 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
ENGW 1111	4	Open elective	4	Vacation	0	Vacation	0
PHIL 1110	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16	16	0	0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative elective	4	Co-op	0	Co-op	0	Elective	4
Open elective	4					Elective	4
Lived elective	4					Elective	4
Elective	4						
		16	0	0	0		12

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Advanced-level elective	4	Co-op	0	Co-op	0	Elective	4
Open elective	4					Elective	4
Religious studies elective	4					Elective	4
Elective	4						
		16	0	0	0		12

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Capstone	4	Open elective	4	Elective	4	Vacation	0
Open elective	4	Elective	4	Elective	4		
Religious studies elective	4	Elective	4				
Elective	4	Elective	4				
		16	16	8	0		0

Total Hours: 128

### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	Open elective	4	Vacation	0	Vacation	0
PHIL 1110	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16	16	0	0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative elective	4	Co-op	0	Co-op	0	Elective	4
Open elective	4					Elective	4
Lived elective	4						
Elective	4						
		16	0	0	0		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Advanced-level elective	4	Co-op	0	Co-op	0	Elective	4
Open elective	4					Elective	4
Religious studies elective	4						
Elective	4						
		16	0	0	0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Open elective	4	Co-op	0	Co-op	0	Vacation	0
Elective	4						
Religious studies elective	4						
Elective	4						
		16	0	0	0		0

Year 5			
Fall	Hours	Spring	Hours
Capstone	4	Elective	4
Religious studies elective	4	Religious studies elective	4
Open elective	4	Elective	4
Elective	4	Elective	4
		16	16

Total Hours: 128

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
ENGL 1400	Introduction to Literary Studies	4
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Pre-Nineteenth-Century Literature</b>		
Complete one of the following:		4
ENGL 1600	Introduction to Shakespeare	
ENGL 1700	Global Literature to 1500	
ENGL 2240	17th-Century British Literature	
ENGL 2296	Early African-American Literature	

ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2301	The Graphic Novel	
ENGL 2330	The American Renaissance	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685	Modern and Contemporary Jewish Literature	
or JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3720	19th-Century Major Figure	
ENGL 3730	20th- and 21st-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
<b>Theories and Methods</b>		
Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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	
<b>Comparative Literature</b>		
Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	

ENGL 2455	American Women Writers Race
ENGL 2460	Multiethnic Literatures of the U.S.
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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	
ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Restricted Electives**

Take two of the following with at least one at the 4000 or 5000 level: 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3460	Philosophy and Literature	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	

PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete three additional electives from the philosophy department. 12

**Integrative Requirement**

Code	Title	Hours
PHIL 3435	Moral Philosophy	4
ENGL 3619	Emerson and Thoreau	4

**English and Philosophy Combined Major Credit Requirement**

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1115	4	PHIL 2325	4	Vacation		Vacation	
ENGL 1000	1	ENGL 1160	4				
ENGL 1400	4	Elective	4				
Elective	4	ENGL Diversity Course	4				
Elective	4						
		17			16		
						0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL Pre Nineteenth Century Literature Course	4	Co-op		Co-op		Elective	4
Elective	4					Elective	4
PHIL 2330	4					Elective	4
ENGL Nineteenth, Twentieth, and Twenty First Century Literature	4						
		16			0	0	
						0	12

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL Restricted Elective	4	Co-op		Co-op		Elective	4

## 1022 Environmental Studies and Philosophy, BA

Elective	4	Elective	4
ENGL Comparative Literature Course	4	Elective	4
ENGL Theories and Methods Course	4		
	16	0	0
			12
<b>Year 4</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours Summer 1</b>
			<b>Hours</b>
ENGL Writing Course	4	Integrative Course	4
ENGL Capstone	4	Elective	4
PHIL Restricted Elective	4	Elective	4
Elective	4	Elective	4
	16	16	8

Total Hours: 129

### Environmental Studies and Philosophy, BA

Through this combined major, successful undergraduates will develop an awareness of the scientific, cultural, and political aspects of the world's environmental problems while considering the philosophical, moral, and ethical impacts that such decisions have on human-environment interactions.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

#### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

#### 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
<b>Social Science Component</b>		
ECON 3423	Environmental Economics	4
POLS 2395	Environmental Politics and Policy	4
INTL 2240	Global Population and Development	4
SOCL 1246	Environment and Society	4
<b>Science Component</b>		
<i>Global Climate Change</i>		
ENVR 1110	Global Climate Change	4
<i>Earth and Environmental Sciences</i>		
ENVR 1200	Dynamic Earth	4
or ENVR 2200	Earth's Changing Cycles	
<i>Environment</i>		
ENVR 1101	Environmental Science	4
<i>Quantitative Methods</i>		
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	

#### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 1180	Environmental Ethics	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy of Science/Environment</b>		
Complete one of the following:		4
PHIL 1105	Science and Pseudoscience	
PHIL 2050	Information and Uncertainty	
PHIL 4510	Philosophy of Science	
PHIL 4555	Philosophy of Biology	
<b>Restricted Electives</b>		
Complete two of the following not used to fulfill another requirement with at least one course at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	

PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

<b>Additional Electives</b>	
Complete two additional PHIL courses.	8

### Integrative Courses

Code	Title	Hours
ENVR 5210	Environmental Planning	4
ENVR 4997	Senior Thesis	4

### Environmental Studies and Philosophy Combined Major Credit Requirement

Complete 72 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
ECON 1116	4	POLS 1150	4	Vacation		Vacation	
PHIL 1115	4	SOCL 1246	4				
INTL 2240	4	PHIL 2325 or POLS 2325	4				
PHIL 1180	4	Elective	4				
	16		16		0		0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENVR 1110	4	PHIL Restricted Elective	4	ENVR 1445	4	Co-op	
ENVR 1112 or 1200	4	ENVR 1101	4	MATH 2280	4		
PHIL 1105 or 4510	4	ENVR 3300 and ENVR 3301	5				
PHIL 2330	4	POLS 2395	4				
	16		17		8		0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Elective	4	Vacation		Co-op	
		ENVR 5210	4				
		PHIL 4000/5000 Elective	4				
		ECON 3423	4				
	0		16		0		0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Elective	4	Elective	4	Co-op	

Elective	4	Elective	4
Elective	4		
Elective	4		
0	16	8	0

Year 5			
Fall	Hours	Spring	Hours
Co-op		ENVR 4997	4
		Elective	4
		Elective	4
		Elective	4
0	16		

Total Hours: 129

### History and Philosophy, BA

The Department of Philosophy and Religion and the Department of History offer an interdisciplinary combined major in philosophy and history. Students interested in the combined major integrate the study of philosophy and ethics with the study and analysis of human history.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4

#### Introductory Level

Choose one course from the 1000 level, excluding HIST 1200/1201	4
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#### 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
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HIST 1185	Introduction to Middle Eastern History
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
HIST 1252	Japanese Literature and Culture
HIST 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
HIST 2390	Africa and the World in Early Times

**Intermediate/Advanced History Cluster**  
 Complete (3) History courses numbered 2000 or above, excluding 2301/2302. 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
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Intermediate/Advanced Electives**  
 Complete three of the following with at least one course at the 4000 or 5000 level: 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Additional Electives**  
 Complete three additional PHIL courses. 8

**Integrative Courses**

Code	Title	Hours
Complete one of the following: 4		
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2395	Japanese Buddhism	

**History and Philosophy Combined Major Credit Requirement**

Complete 85 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1200	1	HIST Introductory Level	4	Vacation		Vacation	
HIST 1201	4	HIST Pre 1800 History Elective	4				
ENGW 1111	4	HIST 1000	1				
PHIL 1115	4	PHIL Intermediate/Advanced Elective	4				
PHIL 2325 or POLS 2325	4	PHIL 2330	4				
		17	17	0	0	0	0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST Intermediate/Advanced Elective	4	Vacation		Co-op	
HIST 2302	1	HIST Intermediate/Advanced Elective	4				
PHIL Elective	4	PHIL Intermediate/Advanced Elective	4				
ANTH Area Course	4	PHIL Intermediate/Advanced Elective	4				
PHIL Elective	4	Elective	1				
		17	17	0	0	0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST Intermediate/Advanced Elective	4	Elective	4	Co-op	

PHIL Integrative Course	4	Elective	4
PHIL Elective	4		
HIST Advanced Elective	4		
0		16	
		8	
		0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST Elective or Integrative Course	4	Elective	4	Co-op	
		PHIL Elective	4				
		PHIL Elective	4				
		Elective	4				
0		16		4		0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		HSIT Capstone or Senior Project	4
		HIST Elective or Integrative Course	4
		PHIL Intermediate/Advanced Elective	4
		Elective	4
0		16	

Total Hours: 128

**History and 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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**History Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Choose one course from the 1000 level excluding HIST1200/1201.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Choose one course from the following:		4
HIST 1185	Introduction to Middle Eastern History	
HIST 1272	Europe in the Middle Ages, 500–1500	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
HIST 1252	Japanese Literature and Culture	
HIST 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 2390	Africa and the World in Early Times	

**Intermediate/Advanced History**  
Complete four History courses numbered 2003 or above that have not been used to fulfill another requirement. 16

**Advanced History**  
Complete one history course 3000 level or above that have not been used to fulfill another requirement. 4

**Religious Studies Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	



PHIL 1272	Contemporary Religious Ethics
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2322	Responses to the Holocaust
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3410	Religion and Spirituality in the African Diaspora
PHIL 4390	Cults and Sects
PHIL 4545	Religion and Politics in South Asia

**Comparative Religion Elective 4**

Complete one of the following courses that is not used to satisfy another requirement:

PHIL 1111	Introduction to World Religions
PHIL 1130	Ethics: East and West
PHIL 1220	The Meaning of Death
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life

**Electives 20**

Complete six of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film

PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2322	Responses to the Holocaust
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4545	Religion and Politics in South Asia
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

**Integrative Requirements**

Code	Title	Hours
<b>Capstone</b>		<b>4</b>

Complete one of the following courses that is not used to satisfy another requirement:

HIST 4701	Capstone Seminar
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

**Integrative Course 4**

Complete one of the following courses that is not used to satisfy another requirement:

HIST 1185	Introduction to Middle Eastern History
HIST 1290	Modern Middle East
HIST 2370	Renaissance to Enlightenment
PHIL 2395	Japanese Buddhism

**History and Religious Studies Combined Major Credit Requirement**

Complete 78 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 1200	1	HIST 1000	1	Vacation		Vacation	
HIST 1201	4	Intro Level History Course	4				
ENGW 1111	4	Lived Religion Elective	4				
PHIL 1110	4	Pre 1800 History Elective	4				
Elective	4	Elective	4				
		17			17	0	
						0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST Intermediate/Advanced Elective	4	Vacation		Co-op	
HIST 2302	1	HIST Intermediate/Advanced Elective	4				
Comparative Religion Elective	4	Elective	4				
ANTH area course	4	Elective	4				
Elective	4						
		17	16	0	0	0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Integrative Course	4	Elective		4	Co-op
		PHIL 2000 Level Elective	4	Elective		4	
		HIST Advanced Elective	4				
		HIST Intermediate/Advanced Elective	4				
		0	16	8	0	0	0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST Elective	4	Elective		4	Co-op
		PHIL 3000 Level Elective	4	Elective		4	
		Elective	4				
		Elective	4				
		0	16	8	0	0	0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Capstone	4				
		HIST Elective	4				
		Elective	4				
		Elective	4				
		0	16				

Total Hours: 131

**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 cross-

disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social/religious movements; state-society relations (religion, democracy, authoritarianism, social justice and ethics, citizenship); comparative study of religious theology and praxis; and knowledge of particular religious traditions, including Buddhism, Christianity, Hinduism, Islam, and Judaism.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**International Affairs Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
POLS 1155	Comparative Politics	4
or ECON 1115	Principles of Macroeconomics	
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	

<b>Global Dynamics</b>		
Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements:		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	

INTL 5100	Climate and Development
SOCL 1246	Environment and Society
<i>Law, Diplomacy, and Global Governance</i>	
COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations
<i>Human Rights and Social Justice</i>	
HIST 2373	Gender and Sexuality in World History
INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice
<i>Conflict and Security</i>	
CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business

INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media
<b>International Experiential Learning</b>	

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 of the following, both of which must be in one region. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:

### Africa

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

### Asia

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

### Europe

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History

HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

### Latin America

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

### Middle East

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League
<b>Russia</b>	
HIST 1285	Introduction to Russian Civilization

HIST 1286 History of the Soviet Union

SOCL 1215 Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Religious Studies Requirements**

Code	Title	Hours
<b>Required Foundational Course</b>		<b>4</b>
PHIL 1110	Introduction to Religious Studies	
<b>Lived Religion Elective</b>		<b>4</b>
Complete one of the following courses that is not used to satisfy another requirement:		
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2322	Responses to the Holocaust	
PHIL 3410	Religion and Spirituality in the African Diaspora	
PHIL 4545	Religion and Politics in South Asia	
<b>Comparative Religion Elective</b>		<b>4</b>
Complete one of the following courses that is not used to satisfy another requirement:		
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1410	From Vodou and the Rastas to Afro-Islam: African Religions in the Americas	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
<b>Electives</b>		<b>24</b>
Complete six of the following courses, one of which must be 2000-level or above and two of which must be 3000-level or above, that is not used to satisfy another requirement:		
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	

PHIL 1133 Selling Spirituality

PHIL 1220 The Meaning of Death

PHIL 1260 Apocalypticism in Film

PHIL 1270 Judaism, Christianity, and Islam: Abrahamic Religions

PHIL 1271 Sex in Judaism, Christianity, and Islam

PHIL 1272 Contemporary Religious Ethics

PHIL 1275 Hinduism, Buddhism, and Beyond: Eastern Religions

PHIL 1280 Islam: Rituals, Traditions, and Debates

PHIL 1285 Jewish Religion and Culture

PHIL 1290 Chinese Philosophy and Religion

PHIL 1295 Religious Perspectives on Health and Healing

PHIL 1666 The Problem of Evil in Film

PHIL 1667 Science Fiction and Film: Moral Dilemmas and Ethical Analysis

PHIL 2230 Music and Religion

PHIL 2301 Philosophical Problems of Law and Justice

PHIL 2322 Responses to the Holocaust

PHIL 2395 Japanese Buddhism

PHIL 3100 The Religious Worlds of Boston: Faith and Devotion in Urban Life

PHIL 3410 Religion and Spirituality in the African Diaspora

PHIL 4390 Cults and Sects

PHIL 4395 Ramayana

PHIL 4545 Religion and Politics in South Asia

PHIL 4547 Seminar: Apocalypticism

PHIL 4606 Seminar: Theories and Methods in Religious Studies

PHIL 4903 Seminar in Religion

PHIL 4992 Directed Study

**International Affairs and Religious Studies Integrative Requirement**

Code	Title	Hours
<b>Capstone</b>		
INTL 4700	Senior Capstone Seminar in International Affairs	4
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or PHIL 4606	Seminar: Theories and Methods in Religious Studies	
or PHIL 4903	Seminar in Religion	

**Research Methods****International Affairs and Religious Studies Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation		Vacation	
INTL 1101	4	Lived Religion Elective	4				
ENGW 1111	4	Elective	4				
Foreign Language Course	4	Elective	4				
PHIL 1110	4						
		17		16		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative Religion Elective	4	Elective	4	Vacation		Co-op	
Elective	4	Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16		16		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective	4	Co-op	
		ENGW 3315	4	Elective	4		
		PHIL 2000 Level Elective	4				
		Elective	4				
		0		16		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL 3000 Level Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0		16		8	

Year 5			
Fall	Hours	Spring	Hours
Co-op		INTL 4700	4
		Research Method Course	4
		Elective	4
		Elective	4
		0	
		16	

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation		Vacation	
INTL 1101	4	Lived Religion Elective	4				
ENGW 1111	4	Elective	4				
Foreign Language Course	4	Elective	4				
PHIL 1110	4						
		17		16		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign Language Course	4	Co-op		Co-op		Elective	4
Comparative Religion Elective	4					Elective	4
Elective	4						
Elective	4						
		16		0		0	
						8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3315	4	Co-op		Co-op		Elective	4
PHIL 2000 Level Elective	4					Elective	4
Elective	4						
Elective	4						
		16		0		0	
						8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op		Co-op		Vacation	
PHIL 3000 Level Elective	4						
Elective	4						
Elective	4						
		16		0		0	
						0	

Year 5			
Fall	Hours	Spring	Hours
Elective	4	INTL 4700	4
Elective	4	Research Method Course	4
Elective	4	Elective	4
Elective	4	Elective	4
		16	
		16	

Total Hours: 129



## Jewish Studies and Religion, BA

The combined major in Jewish studies and religion offers students an integrated program of study of two naturally complementary fields. Study of Judaism as a religion is greatly enhanced by broad familiarity with the world's religious traditions; conversely, in-depth knowledge of Jewish history, identity, and cultures provides students of religion with valuable insight into the ways in which religion interacts with a wide variety of forces to shape the experiences of the adherents of a particular faith. The combined major is designed to enable students to understand the history, cultures, and religion of the Jewish people; analyze and apply theoretical understanding to the interaction between religious, social, and historical factors that have shaped the experiences of the Jewish people; and demonstrate fluency in understanding the major religious traditions of the world. The combined major in Jewish studies and religion is designed to prepare students for graduate work in Jewish studies, religion, or many of the other disciplines that make up Jewish studies or for work within the Jewish community or in communal organizations associated with other religions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Jewish Studies Requirements

Code	Title	Hours
<b>Required Courses</b>		
PHIL 1285 or JWSS 1285	Jewish Religion and Culture	4
JWSS 4660	Jewish Studies Module	1
<b>Jewish Religion and Thought</b>		
PHIL 2322	Responses to the Holocaust	4
<b>Israel Studies</b>		
Complete one of the following:		4
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
INTL 2100	Modern Israel	
POLS 3470	Arab-Israeli Conflict	
<b>Jewish History</b>		
Complete one of the following:		4

HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 2285 or JWSS 2285	America and the Holocaust	
HIST 2431 or JWSS 2431	Immigration and Identity in the American Jewish Experience	
<b>Jewish Art and Culture</b>		
Complete one of the following:		4
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3678 or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685 or JWSS 3685	Modern and Contemporary Jewish Literature	
<b>Jewish Studies Electives</b>		
Complete three of the following:		12
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3678 or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685 or JWSS 3685	Modern and Contemporary Jewish Literature	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 2285 or JWSS 2285	America and the Holocaust	
HIST 2431 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	
POLS 2370	Religion and Politics	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
SOCL 1241	Violence and Society	
SOCL 2270	Race and Ethnic Relations	

## Religion Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2322	Responses to the Holocaust	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3410	Religion and Spirituality in the African Diaspora	
PHIL 4390	Cults and Sects	
PHIL 4545	Religion and Politics in South Asia	
<b>Comparative Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
<b>Electives</b>		
Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement:		20
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions	
PHIL 1111	Introduction to World Religions	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	

PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2322	Responses to the Holocaust
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3410	Religion and Spirituality in the African Diaspora
PHIL 4390	Cults and Sects
PHIL 4545	Religion and Politics in South Asia
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

### Capstone

Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	

## Integrative Requirements

Code	Title	Hours
Complete one of the following courses that is not used to satisfy another requirement:		4
HIST/JWSS 1294	History of the Jews in the Modern World	
or JWSS 1294	History of the Jews in the Modern World	
HIST 2431	Immigration and Identity in the American Jewish Experience	
or JWSS 2431	Immigration and Identity in the American Jewish Experience	

### Hebrew Language Introduction

Complete two courses in Hebrew. These courses also count toward the BA language requirement.	8
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## Jewish Studies and Religion Major Credit Requirement

80 major semester hours required

## Program Requirement

128 total semester hours required

## Plan of Study

### Four Years, Two Co-ops in Spring/Summer 1

#### Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	Lived Religion Elective	4	Vacation	0	Elective	4
PHIL 1110	4	Israel Studies	4			Elective	4
PHIL 1285 or JWSS 1285	4	HBRW 1101	4				
Elective	4	PHIL 2322	4				
	16		16		0		8

#### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op		Co-op	0	Elective	4
Jewish History Course	4					JS Elective	4
Comparative Religion Elective	4						
HBRW 1102	4						
	16		0		0		8

#### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 2000 Level Elective	4	Elective	4	Elective	4	Elective	4
Jewish Art and Culture Course	4	JWSS 4660	1	Elective	4	Elective	4
Elective	4	Elective					
JS Elective	4	JS Elective	4				
	16		9		8		8

#### Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 3000 Level Elective	4	Co-op		Co-op		Elective	4
Elective	4					Elective	4
Intergrative Requirement Course	4						
PHIL Capstone	4						
	16		0		0		8

Total Hours: 129

## Media and Screen Studies and Philosophy, BA

The Media and Screen Studies Program and the Department of Philosophy and Religion offer a combined major in media and screen studies and philosophy. The combined major integrates the analysis, research, and production of traditional and emerging media along with

the study of questions and theories related to morality, society, religion, and the natural and social sciences.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), and Difference and Diversity (DD) may be met through electives in the major.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
(NUpath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a philosophy capstone course is not selected for 'Restricted Philosophy Electives.')		
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Restricted Philosophy Electives</b>		
Complete three of the following with at least one course at the 4000 or 5000 level:		12
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4510	Philosophy of Science	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

<b>Philosophy Electives</b>		Hours
Complete three additional electives from the philosophy department.		12

### Integrative Requirement

Code	Title	Hours
MSCR 3600	Film Theory	4

### Media and Screen Studies Grade Requirement

No more than two grades below a C in media and screen studies courses may be used to satisfy degree requirements

### Major Credit Requirement

Complete 76 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4
PHIL 1115	4	PHIL 2325 or POLS 2325	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
		17			16		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EEAM 2000	1	Restricted PHIL elective 1	4	Elective	4	Co-op	4
MSCR elective	4	MSCR writing-intensive	4	Elective	4		4
PHIL 2330	4	PHIL elective	4				
MSCR diversity/globalization	4	Elective	4				
PHIL elective	4						
		17			16		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Restricted PHIL elective 2	4	Elective	4	Co-op	4
		MSCR writing-intensive	4	Elective	4		4
		PHIL elective	4				
		MSCR elective	4				
		0			16		
Year 4							
Fall	Hours	Spring	Hours				
Co-op		MSCR 3600	4				
		MSCR elective	4				

Restricted	4
PHIL elective	
3	
Elective	4
0	16

Total Hours: 130

## Political Science and Philosophy, BA

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Successful students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4
<b>Political Thought</b>		
Complete two of the following:		8
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

### Political Science Electives

Complete four courses in the following range: 16  
POLS 2000 to POLS 5999

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. 1037).

- American Political Institutions (p. 1037)
- Campaigns and Elections (p. 1037)
- Comparative Politics (p. 1037)
- Identity, Culture, and Politics (p. 1037)
- International Relations and Diplomacy (p. 1037)
- Law and Legal Studies (p. 1037)
- Public Policy (p. 1038)
- Security Studies (p. 1038)

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 2303	Social and Political Philosophy	4
<b>Philosophy Restricted Electives</b>		
Complete two of the following (not used to fulfill another requirement):		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4901	Topics in Philosophy Seminar	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

### Additional Electives

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Program Requirement**

128 semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		
		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		
		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		
		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		
		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
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 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		
		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		
		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		
		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	



**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	
POLS 1000	1	POLS 1150	4	PHIL 2325 or POLS 2325	4	
POLS 1155	4	POLS 1160	4	PHIL Restricted Elective	4	
ENGW 1111	4	Foreign Language		4		
PHIL 1115	4	MATH 1215	4			
POLS elective	4					
		17	16		8	
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
POLS Thought	4	Co-op		Co-op		Foreign Language
POLS 2399	4					Elective
Foreign Language	4					
PHIL 2330	4					
		16	0		0	
						8

Year 3				
Fall	Hours	Spring	Hours	Summer 1
		Co-op		Co-op
PHIL 2303	4			
PHIL 5001	4			
POLS 2400	4			
PHIL Restricted Elective	4			
		16	0	
				0
Year 4				
Fall	Hours	Spring	Hours	Summer 1
		Co-op		Co-op
POLS elective	4			
POLS elective	4			
POLS Thought course	4			
PHIL Elective	4			
		16	0	
				0
Year 5				
Fall	Hours	Spring	Hours	
PHIL Elective	4	Elective	4	
PHIL Elective	4	Elective	4	
POLS Elective	4	Elective	4	
Elective	4	PHIL Elective	4	
		16	16	

Total Hours: 129

**Religious Studies and Africana Studies, BA**

The Department of Philosophy and Religion and the Program in Africana Studies offer an interdisciplinary combined major in religious studies and Africana studies. Students interested in the combined major integrate the study of religious traditions, religious praxis, and religious ethics with critical and systematic examination of the cultural, political, social, economic, and historical experiences of African Americans throughout the hemisphere and peoples of African descent around the world.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Religious Studies Major Requirements

Code	Title	Hours
<b>Required Foundational Course</b>		
PHIL 1110	Introduction to Religious Studies	4
<b>Lived Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1133	Selling Spirituality	
PHIL 1220	The Meaning of Death	
PHIL 1260	Apocalypticism in Film	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2230	Music and Religion	
PHIL 2322	Responses to the Holocaust	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 4390	Cults and Sects	
PHIL 4545	Religion and Politics in South Asia	
<b>Comparative Religion Elective</b>		
Complete one of the following courses that is not used to satisfy another requirement:		4
PHIL 1111	Introduction to World Religions	
PHIL 1130	Ethics: East and West	
PHIL 1220	The Meaning of Death	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	

**Electives**  
Complete five of the following courses, one of which must be 2000-level or above and another one of which must be 3000-level or above, that is not used to satisfy another requirement: 20

PHIL 1111	Introduction to World Religions
PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1120	Understanding the Bible
PHIL 1130	Ethics: East and West
PHIL 1133	Selling Spirituality
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4390	Cults and Sects
PHIL 4395	Ramayana
PHIL 4545	Religion and Politics in South Asia
PHIL 4547	Seminar: Apocalypticism
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**Capstone**  
Complete one of the following courses that is not used to satisfy another requirement: 4

PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

### Africana Studies Requirements

Code	Title	Hours
<b>Foundational</b>		
AFAM 1101	Introduction to African-American Studies	4
or AFRS 1101	Introduction to African Studies	
<b>Introductory</b>		
Complete one of the following:		4
AFAM 1101	Introduction to African-American Studies	
AFAM 1104	The African-American Experience through Music	
AFAM 1113	Black Popular Culture	
AFAM 1135	John Coltrane and the History of Jazz in the United States	
AFAM 1225	Gender, Race, and Medicine	
AFRS 1270	Introduction to Global Health	

**Humanities**  
Complete two of the following: 8

AFAM 2296	Early African-American Literature
AFAM 2455	American Women Writers and Race

AFAM 3663	The African American Novel
<b>Social Sciences</b>	
Complete two of the following: 8	
AFRS 2307	Africa Today
AFAM 2399	Black Community and Social Change
AFRS 2465	The Scope and Dynamics of Conflicts in Africa
AFRS 3410	Religion and Spirituality in the African Diaspora
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
AFRS 3464	Natural Resources and Sustainable Development

**Electives**

Note: Electives may not double count for other AFAM or HIST combined-major requirements.

Complete one AFAM/AFRS course at the 2000 level or above	4
Complete one AFAM/AFRS course at the 3000 level or above	4

**Senior Capstone**

Choose one capstone course from the list below. 4	
AFAM 4700	Capstone
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

**Integrative Requirement**

Code	Title	Hours
Complete the following course: 4		
PHIL 3410	Religion and Spirituality in the African Diaspora	
or AFRS 3410	Religion and Spirituality in the African Diaspora	

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	Lived Religion Elective	4	Elective	4	Vacation	
PHIL 1110	4	Introductory Course	4	Elective	4		
Elective	4	Elective	4				
AFAM 1101 or AFRS 1101	4	Elective	4				
		16			16		
					8		
						0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Comparative Religion Elective	4	Co-op	4	Co-op	4	Elective	4

Social Sciences Course	4			Elective	4		
PHIL 2000 Level Elective	4						
Elective	4						
		16			0		
					0		
						8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	AFAM/AFRS 3000 Level Elective	4	Elective	4	Elective	4
Humanities Course	4	PHIL 3000 Level Elective	4	Elective	4	Elective	4
Social Sciences Course	4	Elective	4				
AFAM/AFRS 2000 Level Elective	4	Elective	4				
		16			16		
						8	
						8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours		
Humanities Course	4	Co-op	4	Co-op			
Integrative Requirement Course	4						
PHIL Advanced Level Elective	4						
Capstone	4						
		16			0		
						0	

Total Hours: 128

**Philosophy, BS**

Philosophy is a basic field of inquiry. Its range encompasses ideas and issues in every domain of human experience, and its methods apply to problems of an unlimited variety. The major in philosophy can develop not only philosophical skill and sophistication but also critical thinking and writing abilities that are readily applicable to pursuits in other academic areas, useful in careers far removed from philosophy, and valuable in everyday social and personal life. The study of philosophy can profoundly affect both the thinking one does and the kind of person one is.

There are a variety of ways to major in philosophy that students may choose from in accordance with their own backgrounds and interests. These include:

- **Philosophy generalist**  
Offers students a maximum number of electives so they may choose in accordance with their own backgrounds and interests
- **Concentration in law and ethics**

Focuses elective course work in the areas of law, social and political philosophy, and applied ethics

- **Concentration in ethics**

Focuses elective course work in the areas of ethical theory, applied ethics, and social and political philosophy

- **Concentration in religious studies**

Uses electives to explore a variety of both religious expressions and methods of inquiry

- **Concentration in formal methods**

Focuses elective course work in areas of logic and formal methods.

- **Combined majors** in media and screen studies and philosophy, economics and philosophy, environmental studies and philosophy, political science and philosophy, English and philosophy, history and philosophy, criminal justice and philosophy, computer science and philosophy, and physics and philosophy

- **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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Concentration

Complete one of the following concentrations:

- Philosophy Generalist (p. 1041)
- Law and Ethics (p. 1041)
- Ethics (p. 1042)
- Religious Studies (p. 1043)
- Formal Methods (p. 1043)

### 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
<i>Philosophy Required Courses</i>		
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
<i>Philosophy Advanced Elective/Seminar</i>		
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 4550	Philosophy of Economics	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
<i>Additional Electives</i>		
Complete three additional courses in philosophy and religion.		12

#### CONCENTRATION IN LAW AND ETHICS

Code	Title	Hours
<i>Philosophy Required Courses</i>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<i>Philosophy Advanced Elective/Seminar</i>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4390	Cults and Sects	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	

PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
<i>Ethics-Related Electives</i>		
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 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 2303	Social and Political Philosophy	
PHIL 2325	Ancient Philosophy and Political Thought	
PHIL 2395	Japanese Buddhism	
PHIL 4390	Cults and Sects	
PHIL 4550	Philosophy of Economics	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

*Law-Related Electives*

Complete two courses from social science departments. These courses are to be chosen in consultation with the department:

AFAM 2360	Politics of Poverty	
AFRS 3460	Contemporary Government and Politics in Africa	
CRIM 2100	Criminal Due Process	
CRIM 2200	Criminology	
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	Violence and Society	
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
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*Philosophy Required Courses*

PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4

*Philosophy Advanced Elective/Seminar*

Complete two of the following courses with 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 4550	Philosophy of Economics	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	

*Ethics Courses*

Complete four of the following: 16

PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 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 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1290	Chinese Philosophy and Religion
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2001	Ethics and Evolutionary Games
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 2303	Social and Political Philosophy
PHIL 2325	Ancient Philosophy and Political Thought
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4390	Cults and Sects
PHIL 4550	Philosophy of Economics
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy

**CONCENTRATION IN RELIGIOUS STUDIES**

Code	Title	Hours
<i>Philosophy Required Courses</i>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 3435	Moral Philosophy	4
<i>Philosophy Advanced Elective/Seminar</i>		
Complete two of the following courses with one at the 4000 or 5000 level:		8
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4390	Cults and Sects	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
<i>Religious Studies Courses</i>		
Complete three of the following:		12
PHIL 1110	Introduction to Religious Studies	
PHIL 1111	Introduction to World Religions	

PHIL 1130	Ethics: East and West
PHIL 1120	Understanding the Bible
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1666	The Problem of Evil in Film
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 4390	Cults and Sects
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 4992	Directed Study

**CONCENTRATION IN FORMAL METHODS**

Code	Title	Hours
<i>Philosophy Required Courses</i>		16
PHIL 1115	Introduction to Logic	
PHIL 2325	Ancient Philosophy and Political Thought	
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	
PHIL 4515	Advanced Logic	
<i>Formal Methods Courses</i>		
Complete four of the following at least three of which must be PHIL (one of which must be 3000 or above)		16
CS 2800	Logic and Computation	
ECON 4681	Information Economics and Game Theory	
INSH 1500	Digital Methods for Social Sciences and Humanities	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
MATH 2280	Statistics and Software	
MATH 3081	Probability and Statistics	
PHIL 1105	Science and Pseudoscience	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1300	Knowledge in a Digital World	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 2050	Information and Uncertainty	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
POLS 3310	Public Opinion, Voting, and Elections	



*Philosophy Electives* 8

Complete two other PHIL courses (not used to fulfill another requirement) at least one of which is at the 4000/ 5000 level

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	PHIL undergraduate elective	4				
PHIL 1101	4	Elective	4				
Elective	4	Elective	4				
		16			16		
					0		
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Elective	4	Vacation	0	Co-op	0
PHIL 2325	4	PHIL 2330	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
		16			17		
					0		
						0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHIL 1115	4	PHIL undergraduate elective	4	Co-op	0
		PHIL undergraduate elective	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		0			16		
					8		
						0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Advanced philosophy elective	4	Upper-division elective	4	Co-op	0
		Upper-division elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0			16		
					8		
						0	
Year 5							
Fall	Hours	Spring	Hours				
Co-op	0	Philosophy seminar	4				
		Elective	4				
		Upper-division elective	4				

Elective	4
0	16

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	PHIL undergraduate elective	4				
PHIL 1101	4	Elective	4				
Elective	4	Elective	4				
		16			16		
					0		
						0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
PHIL 2325	4					Elective	4
Elective	4						
Elective	4						
EESH 2000	1						
		17			0		
					0		
						8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Upper-division elective	4
PHIL 2330	4					Elective	4
Elective	4						
Elective	4						
		16			0		
					0		
						8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL undergraduate 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				
Advanced philosophy elective	4	Philosophy seminar	4				
PHIL undergraduate elective	4	Elective	4				
Upper-division elective	4	Upper-division elective	4				
Elective	4	Elective	4				
		16			16		

Total Hours: 129

**Philosophy with Concentration in Law and Ethics, BS**

**FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Moral and political elective	4				
PHIL 1101	4	Elective	4				
Elective	4	Elective	4				
		16	16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Elective	4	Vacation	0	Co-op	0
PHIL 2325	4	PHIL 2330	4				
Elective	4	Elective	4				
Elective	4	Law-related elective	4				
		EESH 2000	1				
		16	17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHIL 1115	4	Elective	4	Co-op	0
		Moral and political elective	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		0	16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHIL 3435	4	Upper-division elective	4	Co-op	0
		Law-related elective	4	Elective	4		
		Upper-division elective	4				
		Elective	4				
		0	16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	Philosophy seminar	4
		Elective	4
		Upper-division elective	4
		Elective	4
		0	16

Total Hours: 129

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Moral and political elective	4				
PHIL 1101	4	Elective	4				
Elective	4	Law-related elective	4				
		16	16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
PHIL 2325	4					Elective	4
Elective	4						
Elective	4						
EESH 2000	1						
		17	0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Upper-division elective	4
PHIL 2330	4					Elective	4
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 seminar	4
Upper-division elective	4	Elective	4
Elective	4	Upper-division elective	4
Elective	4	Elective	4
		16	16

Total Hours: 129

**Philosophy with Concentration in Religious Studies, BS**

**FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Religious studies elective	4				
PHIL 1101	4	Elective	4				
Elective	4	Elective	4				
		16			16		
					0	0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Elective	4	Vacation	0	Co-op	0
PHIL 2325	4	PHIL 2330	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
		16			17		
					0	0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHIL 1115	4	Upper-division elective	4	Co-op	0
		Religious studies elective	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		0			16		
					8	0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHIL 3435	4	PHIL undergraduate elective	4	Co-op	0
		Religious studies elective	4	Elective	4		
		Upper-division elective	4				
		Elective	4				
		0			16		
					8	0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	Elective	4
		Philosophy seminar	4
		Upper-division elective	4
		Elective	4
		0	16

Total Hours: 129

**FIVE YEARS, THREE CO-OPS IN SPRING/SUMMER 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1215	4	Elective	4	Vacation	0	Vacation	0
ENGW 1111	4	Religious studies elective	4				
PHIL 1101	4	Elective	4				
Elective	4	Elective	4				
		16			16		
					0	0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Elective	4
PHIL 2325	4					Elective	4
Elective	4						
Elective	4						
EESH 2000	1						
		17			0		
					0	8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op	0	Co-op	0	Upper-division elective	4
PHIL 2330	4					Elective	4
Religious studies elective	4						
Elective	4						
		16			0		
					0	8	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Religious studies elective	4	Co-op	0	Co-op	0	Vacation	0
Elective	4						
PHIL 1115	4						
ENGW 3315	4						
		16			0		
					0	0	

**Year 5**

Fall	Hours	Spring	Hours
PHIL 3435	4	Philosophy seminar	4
PHIL undergraduate elective	4	PHIL undergraduate elective	4
Upper-division elective	4	Elective	4
Elective	4	Upper-division elective	4
		16	16

Total Hours: 129

## Behavioral Neuroscience and Philosophy, BS

The behavioral neuroscience and philosophy combined degree program engages students in the interdisciplinary study across the biology, psychology, and philosophy departments. The major provides rigorous training in both disciplines with a specific focus on understanding seminal questions concerning human nature and the mind. Courses in the basic sciences will lay a strong foundation in biology, chemistry, and data analytics that are relevant to neuroscience. In behavioral neuroscience core courses, students will examine the structure and function of the human nervous system in order to explore brain mechanisms that give rise to behavioral functions, including cognitive processes, as well as pathological states. In philosophy courses, successful students will develop core analytics skills, including ethical reasoning; learn to recognize and question deep theoretical assumptions at the heart of scientific theories and practice; and explore the social and ethical dimensions of neuroscience and scientific practice more broadly. The fields of behavioral neuroscience and philosophy are further bridged with course work that is designed to enable students to apply neuroscientific concepts to philosophical, moral, and ethical questions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Behavioral Neuroscience Requirements

Code	Title	Hours
<b>Behavioral Neuroscience Overview</b>		
BNSC 1000	Behavioral Neuroscience at Northeastern <sup>1</sup>	1
EESC 2000	Professional Development for Co-op <sup>2</sup>	1
<b>COS Foundations</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
CHEM 1161 and CHEM 1162	General Chemistry for Science Majors and Lab for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
<b>Mathematics Foundation</b>		
MATH 1251	Calculus and Differential Equations for Biology 1	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Statistics Foundation</b>		
Complete one of the following:		4-5

ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500
or PSYC 2320	Statistics in Psychological Research

<b>Behavioral Neuroscience Foundation</b>		
PSYC 3200	Clinical Neuroanatomy	4
PSYC 3458	Biological Psychology	4
<b>Psychology Elective</b>		
Complete one of the following:		4
PSYC 1214	The Moral Mind: The Science Underlying Ethical Decision-Making and Virtuous Character	
PSYC 3404	Developmental Psychology	
PSYC 3406	Abnormal Psychology	
PSYC 3450	Learning and Motivation	
PSYC 3451	Learning Principles and Behavior Analysis	
PSYC 3452	Sensation and Perception	
PSYC 3464	Psychology of Language	
PSYC 3466	Cognition	
PSYC 4520	Language and the Brain	
PSYC 4524	Cognitive Development	
<b>Behavioral Neuroscience Core Courses</b>		
Complete two of the following:		8
BIOL 3403	Animal Behavior	
BIOL 3415	Current Topics in Behavioral Neuroscience	
BIOL 3601	Neural Systems and Behavior	
BIOL 3605	Developmental Neurobiology	
BIOL 4705	Neurobiology of Cognitive Decline	
BIOL 5595	Cell and Molecular Neuroscience	
BIOL 5601	Multidisciplinary Approaches in Motor Control	
PSYC 3506	Neuropsychology of Fear	
PSYC 3508	Behavioral Endocrinology	
PSYC 3510	Brain, Behavior, and Immunity	
PSYC 4510	Psychopharmacology	
PSYC 4512	Neuropsychology	
PSYC 4514	Clinical Neuroscience	
PSYC 4570	Behavioral Genetics	
<b>Upper-Division Elective</b>		
Complete one course that is not already taken as long as pre-requisites have been met:		4
BNSC 4970 or higher		
BIOL 3403 or higher		
PSYC 3404 or higher		
<sup>1</sup> Students entering through CSSH may take Philosophy at Northeastern (PHIL 1000).		
<sup>2</sup> Students entering through CSSH may take Professional Development for Co-op (EESH 2000).		
<b>Philosophy Requirements</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Philosophy Foundation</b>		
PHIL 1105	Science and Pseudoscience	4

or PHIL 2050	Information and Uncertainty	
PHIL 1115	Introduction to Logic	4
PHIL 1145	Technology and Human Values	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Philosophy Restricted Electives**

Complete eight credits from the following list, not taken to fulfill other requirements: 8

PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	

**Additional Electives**

Complete two additional PHIL courses, not taken to fulfill other requirements. 8

**Integrative Requirements**

Code	Title	Hours
BIOL 4709	Neurobiology of Learning and Memory	4
or BIOL 5587	Comparative Neurobiology	
PHIL 4535	Philosophy of Mind	4
or PHIL 4555	Philosophy of Biology	

**Writing Courses**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
<b>Advanced Writing in the Disciplines</b>		
ENGW 3307	Advanced Writing in the Sciences	4
or ENGW 3308	Advanced Writing in the Social Sciences	
or ENGW 3309	Advanced Writing in the Humanities	
or ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
	Complete 16 credits of general electives.	16

**Behavioral Neuroscience GPA Requirement**

A minimum 2.000 GPA in all behavioral neuroscience courses is required.

**Combined-Major Credit Hour Requirement**

96 total semester hours required in major.

**Program Requirement**

130 total semester hours required

**Plan of Study**

**SAMPLE PATTERNS:  
5 YEARS, 3 CO-OPS**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	Vacation		Vacation	
BIOL 1107 and BIOL 1108	5	BIOL 2299	4				
CHEM 1161 and CHEM 1162 and CHEM 1163	5	MATH 1251	4				
PSYC 1101	4	PSYC 3458	4				
PHIL 1145	4						
		19		16		0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	EESC 2000	1	Vacation		Co-op	
BIOL 2301 and BIOL 2302	5	CHEM 2311 and CHEM 2312	5				
PHIL 1105	4	PSYC 2320	4				
PHIL 1115	4	PHIL 2330	4				
		PHIL restricted elective	4				
		17		18		0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL restricted elective	4	PHIL 2325	4	Co-op	
		BNS core course	4	General elective	4		
		PSYC elective	4				
		General elective	4				
		0		16		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BIOL 4709 or 5587	4	Vacation		Co-op	
		BNS core course	4			ENGW 3315 (online)	4
		PHIL elective	4				
		General elective	4				
		0		16		0	
Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL 4535 or 4555	4				
		PHIL elective	4				

BNS upper-level elective	4
General elective	4
<b>0</b>	<b>16</b>

General elective	4
<b>0</b>	<b>16</b>

Total Hours: 130

### Computer Science and Philosophy, BS

The computer science and philosophy combined major offers an opportunity to obtain a fluency in formal logic, including logical proofs and the ability to represent arguments clearly and evaluate them for cogency. Students will find that logic plays a fundamental role in computer science as they experience an in-depth programming foundation. The philosophy curriculum also focuses on oral and written communication, as well as ethical and social issues related to computing and information technologies.

#### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

#### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

#### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

#### Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 2800 and CS 2801	Logic and Computation and Lab for CS 2800	5
CS 3000	Algorithms and Data	4
CS 3500	Object-Oriented Design	4
CS 3800	Theory of Computation	4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1

### 4 YEARS, 2 CO-OPS

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
BNSC 1000	1	ENGW 1111	4	PHIL 2325	4	Vacation	
BIOL 1107 and BIOL 1108	5	BIOL 2299	4	PSYC elective	4		
CHEM 1161 and CHEM 1162 and CHEM 1163	5	MATH 1251	4				
PSYC 1101	4	PSYC 3458	4				
PHIL 1145	4						
	19		16		8		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PSYC 3200	4	EESC 2000	1	PSYC 2320	4	Co-op	
BIOL 2301 and BIOL 2302	5	CHEM 2311 and CHEM 2312	5	General elective	4		
PHIL 1115	4	PHIL 2330	4				
PHIL 1105	4	PHIL restricted elective	4				
		BNS core course	4				
	17		18		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		BNS core course	4	PHIL elective	4	Co-op	
		PHIL restricted elective	4	General elective	4	ENGW 3315 (online)	4
		PHIL elective	4				
		General elective	4				
	0		16		8		4

**Year 4**

Fall	Hours	Spring	Hours
Co-op		BIOL 4709 or 5587	4
		PHIL 4535 or 4555	4
		BNS upper-level elective	4



**Khoury Elective**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken for upper-division electives.

Complete 8 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

**Philosophy Courses**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
or PHIL 2330	Modern Philosophy	
PHIL 1145	Technology and Human Values	4
PHIL 4515	Advanced Logic	4
PHIL 5005	Information Ethics	4
or PHIL 5010	AI Ethics	

**Electives**

Take four additional PHIL courses, at least one of which is 4000 or above 16

**Integrative Course Requirement**

Code	Title	Hours
These courses will double count in other areas of your major.		
CS 3800	Theory of Computation	
PHIL 4515	Advanced Logic	

**Computer Science English Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one course from the following: <span style="float: right;">4</span>		
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3309	Advanced Writing in the Humanities	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 44 credits of general electives.		44

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World

- Conducting Formal and Quantitative Reasoning

- Analyzing and Using Data

- Writing-Intensive in the Major

- Interpreting Culture
- Understanding Societies and Institutions
- Employing Ethical Reasoning
- Writing in the First Year

- Advanced Writing in the Disciplines

- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**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
CS 1200	1	CS 2510 and CS 2511	5	CS 3500	4	Vacation
CS 1800 and CS 1802	5	CS 2800 and CS 2801	5	Elective	4	
CS 2500 and CS 2501	5	PHIL 2325, POLS 2325, or PHIL 2330	4			
ENGW 1111	4	Elective	4			
PHIL 1115	4					
		19		18		8
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
CS 3000	4	Khoury Elective	4	ENGW 3302, 3309, or 3315	4	Co-op
PHIL 1145	4	PHIL elective 2	4	Elective	4	
PHIL elective 1	4	PHIL elective 3	4			
Elective	4	Elective	4			
		16		17		8
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
Co-op		CS 3800	4	Elective	4	Co-op
		Khoury Elective		4		4
		PHIL 4515		4		4
		Elective		4		4

	THTR 1170	1			
	0	17	8	0	
<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
Co-op	CS 4500	4	Elective	4	
	PHIL intermediate/advanced elective	4	Elective	4	
	PHIL capstone	4			
	Elective	4			
	0	16	8		

Total Hours: 135

### Five Years, Three Co-ops in Summer 2/Fall

<b>Year 1</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 1200	1	CS 2510 and CS 2511	5	Vacation		Vacation
CS 1800 and CS 1801	4	CS 2800 and CS 2801	5			
CS 2500 and CS 2501	5	PHIL 2325, POLS 2325, or PHIL 2330	4			
ENGW 1111	4	Elective	4			
PHIL 1115	4					
	18		18	0		0

<b>Year 2</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
CS 3000	4	Khoury Elective	4	Vacation		Co-op
CS 3500	4	PHIL elective 1	4			
PHIL 1145	4	PHIL elective 2	4			
Elective	4	Elective	4			
		CS 1210	1			
	16		17	0		0

<b>Year 3</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	CS 3800	4	ENGW 3302, 3309, or 3315	4	Co-op	4
	PHIL 4515	4	Elective	4		
	PHIL elective 3	4				
	Elective	4				
	THTR 1170	1				
	0		17	8		0

<b>Year 4</b>						
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>
Co-op	Khoury Elective	4	Elective	4	Co-op	4

	PHIL intermediate/advanced elective	4	Elective	4
	Elective	4		
	Elective	4		
	0	16	8	0

<b>Year 5</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
Co-op	CS 4500	4	
	PHIL capstone	4	
	Elective	4	
	Elective	4	
	0	16	

Total Hours: 134

## Criminal Justice and Philosophy, BS

The School of Criminology and Criminal Justice and the Department of Philosophy and Religion offer a combined major in criminal justice and philosophy. This combined major educates students in criminal justice and philosophy and in the interface between the two disciplines. The scope and sequence of philosophy courses provide students with a foundation in topics such as social and political philosophy, philosophy of law, and moral philosophy, while also developing robust analytical and evaluative skills. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should have depth of knowledge with respect to analyzing and addressing criminal behavior, as well as with respect to the philosophical and ethical aspects of topics such as law, punishment, justice, and social institutions.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Criminal Justice Major Requirements

Code	Title	Hours
<b>Criminal Justice Required Courses</b>		
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	Analyzing and Using Data on Crime and Justice	4

**Co-op Integration Seminars**

Co-op students should complete the seminars below. Non-co-op students should complete a 4-semester-hour CRIM elective.

Complete two of the following courses. CRIM 2000 and CRIM 3000 are required for the first co-op. CRIM 4000 is required if a second co-op is taken. 2-4

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
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**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 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 additional CRIM course. 4

**Philosophy Requirements**

Code	Title	Hours
<b>Required Courses</b>		
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 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 3360	Scientific Approaches to Philosophy	

PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4555	Philosophy of Biology
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy 4000/5000 Elective**

Complete one of the following not used to satisfy previous requirements: 4

PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Philosophy Electives**

Complete two additional PHIL courses. 8

**Integrative Requirement**

Code	Title	Hours
<b>Philosophy Integrative Course</b>		
PHIL 2301	Philosophical Problems of Law and Justice	4
<b>Criminal Justice Integrative Course</b>		
CRIM 1400	Human Trafficking	4

**Criminal Justice and Philosophy Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1100	4	CRIM 2100	4	Elective	4	Vacation	
PHIL 1115	4	CRIM 2200	4	Elective	4		
ENGW 1111	4	PHIL 2325 or POLS 2325	4				
PHIL 1000	1	PHIL 2303	4				

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Economics Requirements

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
ECON 1000	Economics at Northeastern	
PHIL 1000	Philosophy at Northeastern	

### 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
ECON 3520	History of Economic Thought	4
MATH 1231	Calculus for Business and Economics	4

### Economics Electives

Complete 2 Economics elective courses from the following ranges with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics Elective.	8
ECON 1200 to ECON 1999	
ECON 3000 to ECON 4689	
ECON 4900 to ECON 4999	
ECON 5200 to ECON 5999	

CRIM thematic elective	4						
	17		16		8		0
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
CRIM 3600	4	CRIM thematic elective	4	Vacation		Co-op	
CRIM 2000	1	Elective	4				
PHIL 2330	4	Elective	4				
CRIM survey elective	4	PHIL intermediate/advanced elective	4				
PHIL intermediate/advanced elective	4						
	17		16		0		0
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		CRIM 3700	4	Elective		4	Co-op
		CRIM 3000	1	Elective		4	
		PHIL 4000/5000 elective	4				
		CRIM system-wide elective	4				
		PHIL 4000/5000 elective	4				
	0		17		8		0
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Co-op		CRIM elective	4	Vacation		Co-op	
		PHIL 2301	4				
		CRIM 1400	4				
		PHIL elective	4				
		CRIM 4000	1				
	0		17		0		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Co-op		PHIL capstone	4				
		CRIM 4949	4				
		PHIL intermediate/advanced elective	4				
		Elective	4				
	0		16				

Total Hours: 132

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
PHIL 2330	Modern Philosophy	4
<b>Advanced Philosophy Elective</b>		
Complete one of the following:		4
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete three additional electives in philosophy or religion. At least one must be numbered 2000 or above. 12

**Integrative Requirements**

Code	Title	Hours
Complete PHIL 4550 and one of the other courses listed below that has not been used in above requirements:		8
PHIL 4550	Philosophy of Economics	
PHIL 3435	Moral Philosophy	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	

**Major GPA/Credit Requirement**

Grades in the following 4 Economics courses must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
ECON 2560	Applied Econometrics	4

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	PHIL 1115	4	ECON elective 1	4	Elective	4
PHIL 1000 or ECON 1000	1	POLS 2325	4	Elective	4	Elective	4
ECON 1115	4	MATH 1231	4				
Elective	4	ECON 1116	4				
Elective	4						
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 2330	4	PHIL Advanced Elective	4	PHIL Advanced Elective	4	Co-op	4
ECON 2315	4	ECON 2560	4	ENGW 3302, 3302, or 3315	4		
ECON 2350	4	PHIL Integrative Course	4				
ECON elective 2	4	ECON 2316	4				
		16		16		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Integrative Course	4	Elective	4	Co-op	4
		Computing and Social Issues Requirement	4	Elective	4		
		Elective	4				
		ECON 2560	4				
		0		16		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL Intermediate/Advanced Elective	4				
		PHIL Capstone	4				
		ECON 4692	4				
		ECON 3520	4				
		0		16			

Total Hours: 129

**Physics and Philosophy, BS**

The combined major in physics and philosophy provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students

with an understanding of the methods and traditions of philosophical thought, as well as with opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Students will be able to describe the method by which physical “law” is made manifest in the sciences, how this knowledge compares with other epistemological models studied in other contexts, and philosophical views on the status and source of physical “law.”

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Physics Major Requirements

Code	Title	Hours
<b>Introductory Physics</b>		
<i>Physics 1</i>		
Complete one of the following:		5
PHYS 1161 and PHYS 1162	Physics 1 and Lab for PHYS 1161	
PHYS 1151 and PHYS 1152 and PHYS 1153	Physics for Engineering 1 and Lab for PHYS 1151 and Interactive Learning Seminar for PHYS 1151	
<i>Physics 2</i>		
Complete one of the following:		5
PHYS 1165 and PHYS 1166	Physics 2 and Lab for PHYS 1165	
PHYS 1155 and PHYS 1156 and PHYS 1157	Physics for Engineering 2 and Lab for PHYS 1155 and Interactive Learning Seminar for PHYS 1155	
<b>Intermediate Physics</b>		
PHYS 2303	Modern Physics	4
PHYS 2371 and PHYS 2372	Electronics and Lab for PHYS 2371	4
<b>Advanced Physics</b>		
PHYS 3600	Advanced Physics Laboratory	4
PHYS 3602	Electricity and Magnetism 1	4
PHYS 4115	Quantum Mechanics I	4
PHYS 4305	Thermodynamics and Statistical Mechanics	4
<b>Physics Elective</b>		
Complete one of the following:		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	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
PHIL 4500	Theory of Knowledge	4
or PHIL 2050	Information and Uncertainty	
<b>Philosophy Advanced Elective</b>		
Complete two of the following (not used to fulfill another requirement):		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

<b>Additional Electives</b>		
Complete three PHIL courses.		12

### Physics/Philosophy Integrative Requirements

Code	Title	Hours
<b>Integrative Course Requirements</b>		
PHIL 4510	Philosophy of Science	4
PHYS 3601	Classical Dynamics	4



**Breadth Courses**

Code	Title	Hours
<b>Mathematics</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4

**Physics and Philosophy Major Credit Requirement**

Complete 98 semester hours in the major.

**Program Requirement**

132 total semester hours required

**Plan of Study****Notes on Physics Plans of Study**

Some required physics courses are offered in both fall and spring semesters, while other required courses are offered less frequently. Therefore, the suggested plan of study will vary from student to student, depending on the year of entry for that student.

See course offering schedule at the end of the plans of study.

Please contact your academic advisor for additional information and plans of study.

**Even-Numbered Year One****FIVE YEARS, THREE CO-OPS IN SUMMER 2/FALL****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	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				
ENGW 1111	4						
	18		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	MATH 2341	4	Vacation	0	Co-op	0
PHYS 2371	3	PHIL elective	4				
PHYS 2372	1	PHIL elective	4				
MATH 2321	4	EESC 2000	1				
PHIL 2330	4	PHYS 3601	4				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHYS 4115	4	PHYS 3600	4	Co-op	0
		PHYS elective	4	Elective	4		
		PHIL 4500	4				
		PHIL elective	4				
	0		16		8		0

**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		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	PHYS 4305	4
		PHIL advanced elective	4
		Elective	4
		Elective	4
	0		16

Total Hours: 132

**FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	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	4	PHIL 2330	4				
ENGW 1111	4						
	18		17		8		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHYS 2303	4	PHYS 3601	4	PHYS 3600	4	Co-op	0
PHYS 2371	3	PHYS 3602	4	Elective	4		
PHYS 2372	1	PHIL elective	4				
PHIL elective	4	PHIL elective	4				
PHIL elective	4	EESC 2000	1				
	16		17		8		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	PHYS 4115	4	ENGW 3307	4	Co-op	0
		PHYS elective	4	Elective	4		
		PHIL 4500	4				
		PHIL 4510	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op	0	PHYS 4305	4
		PHIL advanced elective	4
		Elective	4

Elective	4
0	16

Total Hours: 132

**OFFERING SCHEDULE (SUBJECT TO CHANGES)**

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 3603 offered fall (even years) and summer 1 (odd years)
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4621 offered spring (odd years) and fall (even years)
- PHYS 4623 offered summer 1 and fall (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

**Political Science and Philosophy, BS**

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4

**Political Thought**

Complete two of the following:		8
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete four courses in the following range:	16
POLS 2000 to POLS 5999	

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1058)
- Campaigns and Elections (p. 1058)
- Comparative Politics (p. 1058)
- Identity, Culture, and Politics (p. 1058)
- International Relations and Diplomacy (p. 1058)
- Law and Legal Studies (p. 1058)
- Public Policy (p. 1058)
- Security Studies (p. 1059)

**Philosophy Requirements**

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2303	Social and Political Philosophy	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

**Philosophy Restricted Electives**

Complete two courses from the following with one course at the 4000 or 5000 level:	8	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	
PHIL 4510	Philosophy of Science	
PHIL 4515	Advanced Logic	
PHIL 4535	Philosophy of Mind	
PHIL 4550	Philosophy of Economics	
PHIL 4555	Philosophy of Biology	
PHIL 4606	Seminar: Theories and Methods in Religious Studies	
PHIL 4903	Seminar in Religion	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	

**Additional Electives**

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Program Requirement**

128 semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	

POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following: 12		
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4

**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	

**CONCENTRATION IN SECURITY STUDIES**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

<b>Year 1</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>		
POLS 1000	1	POLS 1150	4	PHIL 2325 or POLS 2325	4		
POLS 1155	4	MATH 1215	4	PHIL Restricted Elective	4		
ENGW 1111	4	POLS 1160	4				
PHIL 1115	4	Elective	4				
POLS elective	4						
	17		16		8		
<b>Year 2</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>		
POLS Thought	4	Co-op		Co-op			
POLS 2399	4						
PHIL 2330	4						
Elective	4						
	16		0		0		
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
POLS elective	4	Co-op		Co-op		POLS elective	4
PHIL 5001	4					PHIL Restricted Elective	4
POLS 2400	4						

POLS elective	4			
	16	0	0	8

<b>Year 4</b>					
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>
POLS elective	4	Co-op		Co-op	
POLS elective	4				
POLS Thought course	4				
PHIL Elective	4				
	16		0		0

<b>Year 5</b>			
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>
PHIL Elecive	4	Elective	4
PHIL Elective	4	Elective	4
POLS Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

**Politics, Philosophy, and Economics, BS**

Website (<https://www.northeastern.edu/cssh/ppe/>)

371 Holmes Hall  
617.373.3636  
617.373.4359 (fax)

The PPE major at Northeastern University brings together three of the most important approaches to understanding the world around us: political science, philosophy, and economics. The PPE major is an interdisciplinary degree that not only provides students with the analytic tools from three different disciplines but also teaches students to make connections across disciplines and to keep multiple perspectives in mind when analyzing complex social phenomena. This interdisciplinary perspective and set of skills are indispensable in our increasingly interconnected world and are essential in addressing the kinds of complex global problems future leaders will need to tackle.

There are a number of varieties of the PPE major that students may choose from in accordance with their own backgrounds and interests. These include:

- environment and energy policy
- international political economy
- law and justice
- logic and game theory
- political philosophy
- public and economic policy

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Politics, Philosophy, and Economics Major Requirements

Code	Title	Hours
<b>Foundation Course</b>		
PHIL 1160	Introduction to Economic Justice	4
<b>Core Courses</b>		
<i>Philosophy</i>		
PHIL 2303	Social and Political Philosophy	4
PHIL 1115	Introduction to Logic	4
PHIL 3435	Moral Philosophy	4
or PHIL 2325	Ancient Philosophy and Political Thought	
<i>Political Science</i>		
POLS 1160	International Relations	4
POLS 3405	International Political Economy	4
POLS 1150	American Government	4
or POLS 1155	Comparative Politics	
<i>Economics</i>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
or ECON 2316	Microeconomic Theory	
<b>Methods Course</b>		
PHIL 3000	Interdisciplinary Methods for PPE	4
<b>Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
PHIL 4550	Philosophy of Economics	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Major Electives

Code	Title	Hours
Complete two of the following:		8
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		

ECON 5200 to ECON 5999

PHIL 2000 to PHIL 5999

POLS 2000 to POLS 5999

### Concentration

Complete one of the following concentrations:

- Environment and Energy Policy (p. )
- International Political Economy (p. )
- Law and Justice (p. )
- Logic and Game Theory (p. )
- Political Philosophy (p. )
- Public and Economic Policy (p. )

### Supporting Courses

Code	Title	Hours
<b>Racial or Gender Justice</b>		
Complete one of the following:		4
AFAM/POLS 2360	Politics of Poverty	
CRIM 4010	Gender, Crime, and Justice	
HIST 1225	Gender, Race, and Medicine	
HIST 2000	Native American Resistance: Past and Present	
HUSV 3900	Social Policy	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
PHIL 3500	Sexuality, Gender, and the Law	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
SOCL/WMNS 1260	Gender in a Changing Society	
SOCL 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	
WMNS 3100	Gender, Social Justice, and Transnational Activism	
WMNS/COMM 3304	Communication and Inclusion	
WMNS 3500	Sexuality, Gender, and the Law	
<b>Statistics and Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1241	Calculus 1	
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	
<b>Experiential Learning Requirement</b>		

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

### Major GPA/Credit Requirement

Complete 68 semester hours in the major with a 3.000 GPA.

Code	Title	Hours
<b>Economics GPA Requirement:</b>		
Grades in the following courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
or ECON 2316	Microeconomic Theory	
ECON 2350	Statistics	
or POLS 2400	Quantitative Techniques	
or MATH 2280	Statistics and Software	

### Course Distribution Requirement

Complete at least four courses in each of the following subject areas: ECON, PHIL, and POLS.

### 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 1291	Development Economics	
ECON 2316	Microeconomic Theory	
ECON 3290	History of the Global Economy	
ECON 3404	International Food Policy	
ECON 4635	International Economics	
PHIL 1185	The Ethics of Food	
PHIL 1170	Business Ethics	
POLS 3406	International Law	

Code	Title	Hours
POLS 3487	Politics of Developing Nations	
Complete one of the following: 4		
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 the European Union	
POLS 3465	Government and Politics in the Middle East	
HIST 2011	Capitalism and Business: A Global History	

#### CONCENTRATION IN LAW AND JUSTICE

Code	Title	Hours
Complete three of the following, only two of which may be POLS courses: 12		
ECON 3424	Law and Economics	
ECON 1240	Economics of Crime	
HIST 2308	Law, Justice, and Society in Modern China	
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 3500	Sexuality, Gender, and the Law	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	
WMNS 3500	Sexuality, Gender, and the Law	
HIST 2280	Hitler, Germany, and the Holocaust	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 3335	History of Modern Terrorism	

#### CONCENTRATION IN LOGIC AND GAME THEORY

Code	Title	Hours
<b>Required Course</b>		
PHIL 1115	Introduction to Logic	4
<b>Electives</b>		
Complete two of the following: 8		
ECON 4681	Information Economics and Game Theory	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 2050	Information and Uncertainty	
PHIL 4515	Advanced Logic	

#### CONCENTRATION IN POLITICAL PHILOSOPHY

Code	Title	Hours
<b>Politics Courses</b>		
Complete two of the following: 8		
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	



POLS 2332	Contemporary Political Thought
<b>Philosophy Course</b>	
Complete one of the following: 4	
PHIL 2155	Human Rights
PHIL 2301	Philosophical Problems of Law and Justice
PHIL 3435	Moral Philosophy
PHIL 3500	Sexuality, Gender, and the Law
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy

**CONCENTRATION IN PUBLIC AND ECONOMIC POLICY**

Code	Title	Hours
<b>Required Course</b>		
POLS 3307	Public Policy and Administration	4
<b>Elective Courses</b>		
Complete two of the following: 8		
ECON 1240	Economics of Crime	
ECON 1281	Economics of the Creative Industries	
ECON 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 2331	The Civil War and Reconstruction	
HIST 2339	America's Gilded Age, 1865-1896	
HIST 3800	American Conservatism from the New Deal to the Present	
PHIL 1160	Introduction to Economic Justice	
PHIL 5001	Global Justice	
PHIL 5002	Ethics and Public Policy	
POLS 2340	Business and Government	
POLS 2360	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	

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, Two Co-ops Summer 2/ Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHIL 1160	4	ENGW 1111	4	Elective	4	Vacation	
PHIL 1000	1	ECON 1116	4	Elective	4		
MATH 1231	4	PHIL 1115	4				
POLS 1160	4	PHIL 2303	4				
General Elective		4					
		17		16		8	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 1115	4	Statistics and Mathematics Requirement	4	Elective	4	Co-op	
POLS 1150 or 1155	4	ECON 2315 or 2316	4	Elective	4		
PHIL 3435 or 2325	4	Major Elective	4				
Supporting Course in Race or Gender Justice	4	Concentration Course	4				
		16		16		8	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		PHIL 3000	4	General Elective	4	Co-op	
		General Elective		4		4	
		Major Elective		4			
		Concentration Course		4			
		0		16		8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Concentration Course	4	General Elective	4		
		Capstone Requirement		4		4	
		General Elective		4			
		General Elective		4			
		0		16		8	

Total Hours: 129

**Information Ethics, Minor**

This minor aims to help students: (1) develop in-depth knowledge of issues and topics in computing, data, and AI ethics; (2) build robust

skills in ethical analysis, reasoning and evaluation. The minor is open to students from all majors.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

A minimum of three of the courses to fulfill the minor must carry the PHIL prefix. At least two courses must be at or above the 2000-level.

Code	Title	Hours
<b>Foundational Course</b>		
Complete one of the following:		4
PHIL 1145	Technology and Human Values	
PHIL 1300	Knowledge in a Digital World	
<b>Information Ethics Electives</b>		
Complete two courses from the following, not used above, one of which must be at or above the 4000 level:		8
PHIL 1145	Technology and Human Values	
PHIL 1300	Knowledge in a Digital World	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 5005	Information Ethics	
PHIL 5010	AI Ethics	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
<b>Ethics Electives</b>		
Complete one of the following courses not used above.		4
CHME 5185	Design of Experiments and Ethical Research (DOEER)	
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1112	Debating Ethical Controversies	
PHIL 1130	Ethics: East and West	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1170	Business Ethics	
PHIL 1180	Environmental Ethics	
PHIL 1185	The Ethics of Food	
PHIL 1195	Research Ethics	
PHIL 1272	Contemporary Religious Ethics	
PHIL 1300	Knowledge in a Digital World	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 2303	Social and Political Philosophy	

PHIL 2325	Ancient Philosophy and Political Thought
PHIL 3435	Moral Philosophy
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

### Philosophy, Minor

Philosophy addresses questions and theories related to morality, society, religion, and the natural and social sciences. Course work in philosophy provides students with an understanding of the methods and traditions of philosophical thought, as well as opportunities to critically and collaboratively reflect on the nature of the world and the human situation in it. Through readings, discussion, and writing, students examine questions concerning the validity of moral judgments, political ideas, and scientific theories, as well as questions about values and social policy in such areas as law, medicine, and technology.

Course work in philosophy significantly strengthens study in other areas. Many students find that their studies in their major can be beneficially supplemented by pursuing studies in philosophy. Declaring a minor in philosophy will allow you to continue your philosophical studies throughout your time at Northeastern University.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4

### Elective Courses

Code	Title	Hours
Complete three courses in philosophy and religion.		12

### GPA Requirement

2.000 GPA required in the minor

### Religious Studies, Minor

The religious studies minor provides a short form of the religious studies major that can be tailored to the needs of the student.

The minor in religious studies offers the opportunity to acquire an understanding of religion within various contexts through comparative approaches and an engagement with religion in everyday life. Through the minor, a student will enhance their ability to think critically about a range of religious traditions through diverse methodological approaches.

### Minor Requirements

Complete all courses listed below unless otherwise indicated.

**Required Course**

Code	Title	Hours
PHIL 1110	Introduction to Religious Studies	4

**Electives**

Code	Title	Hours
Complete three of the following; at least one must be 2000-level or higher.		12

PHIL 1104	Goddesses, Witches, Saints, and Sinners: Women in Western Religions
PHIL 1111	Introduction to World Religions
PHIL 1133	Selling Spirituality
PHIL 1120	Understanding the Bible
PHIL 1220	The Meaning of Death
PHIL 1260	Apocalypticism in Film
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
PHIL 1272	Contemporary Religious Ethics
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
PHIL 1290	Chinese Philosophy and Religion
PHIL 1295	Religious Perspectives on Health and Healing
PHIL 1666	The Problem of Evil in Film
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis
PHIL 2230	Music and Religion
PHIL 2322	Responses to the Holocaust
PHIL 2395	Japanese Buddhism
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3410	Religion and Spirituality in the African Diaspora
PHIL 4390	Cults and Sects
PHIL 4545	Religion and Politics in South Asia
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion

**GPA Requirement**

2.000 GPA required in the minor

**Ethics, Minor**

The Department of Philosophy and Religion offers a minor in ethics for students who are interested in exploring the ethical dimensions of contemporary issues. From medicine and the environment to business and religion, the minor provides a range of courses that speak to issues you care about and provides you with the tools to explore them. The minor includes courses in ethical theory (e.g., moral philosophy, social and political philosophy, and philosophical problems of law and justice); applied ethics (e.g., environmental ethics, business ethics, moral and social problems in healthcare, and technology and human values);

and religious ethics (e.g., ethics east and west and cults and sects). It emphasizes developing critical analytical and evaluative skills.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

**Required Courses**

Code	Title	Hours
Complete four courses from the following list, two of which must be at or above the 2000 level:		16
PHIL 1102	Introduction to Contemporary Moral Issues	
PHIL 1111	Introduction to World Religions	
PHIL 1112	Debating Ethical Controversies	
PHIL 1120	Understanding the Bible	
PHIL 1130	Ethics: East and West	
PHIL 1133	Selling Spirituality	
PHIL 1145	Technology and Human Values	
PHIL 1160	Introduction to Economic Justice	
PHIL 1162	Ethics and Philosophy through Sport	
PHIL 1165	Moral and Social Problems in Healthcare	
PHIL 1170	Business Ethics	
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	Contemporary Religious Ethics	
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions	
PHIL 1280	Islam: Rituals, Traditions, and Debates	
PHIL 1290	Chinese Philosophy and Religion	
PHIL 1295	Religious Perspectives on Health and Healing	
PHIL 1300	Knowledge in a Digital World	
PHIL 1666	The Problem of Evil in Film	
PHIL 1667	Science Fiction and Film: Moral Dilemmas and Ethical Analysis	
PHIL 2001	Ethics and Evolutionary Games	
PHIL 2016	The Philosophy and Ethics of Lying and Deception	
PHIL 2143	Philosophy for Children	
PHIL 2155	Human Rights	
PHIL 2301	Philosophical Problems of Law and Justice	
PHIL 2325	Ancient Philosophy and Political Thought	
PHIL 2303	Social and Political Philosophy	
PHIL 2395	Japanese Buddhism	
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
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 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

## GPA Requirement

2.000 GPA required in the minor

## Political Science

Website (<http://www.northeastern.edu/polisci/>)

### Costas Panagopoulos, PhD

Professor and Chair

960A Renaissance Park

617.373.2796

617.373.5311 (fax)

Political science teaches the art and science of politics in the United States and throughout the world. Study leadership with a former U.S. presidential candidate. Spend seven weeks visiting the United Nations and other organizations in Geneva, Switzerland. Apply for the White House internship program or to the British Parliament. Develop aid programs in a Saharan village in Niger. Write opinion pieces for an outstanding student political journal. Compete to represent an Arab country as part of one of the top Model Arab League teams in the United States. Political science is a discipline and a subject of study that has worldwide applications and exciting and experiential job opportunities. Politics matter wherever there are groups of people trying to get things done.

Political science majors start their journey with core courses on American government, comparative politics, international relations, and research methods. After that, students choose from a wealth of courses on specific topics from international security to legal studies to public policy.

Political science co-ops include responsible positions in local, state, and federal government agencies; law firms; nonprofit institutions; and corporations. Many students complete either a co-op position or an internship with a congressional representative, a senator, a governor or other elected public officials, or at an international organization or nonprofit.

Political science students are among the most active on campus through extracurricular programs designed to expand their leadership ability, including the Political Science Student Association, International Relations Council, Pi Sigma Alpha honor society, Model United Nations, Model Arab League, Model NATO, student government, College Democrats and Republicans, and other student groups. Students also may qualify for the University Honors Program. With these experiences on their resumés, students are prepared to succeed in law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and nongovernmental organizations (NGOs).

## Academic Progression Standards

Same as university-wide standards described under "Academic Status (p. 27)."

## PlusOne Program (MA) in Political Science

Political science majors at the end of their sophomore year or the beginning of their junior year may qualify for application to the PlusOne program that combines the BA with the master's degree in political science. Students interested in this option should consult with the departmental graduate coordinator.

## Programs

### Bachelor of Arts (BA)

- Political Science (p. 1065)
- English and Political Science (p. 873)
- Environmental Studies and Political Science (p. 647)
- History and Political Science (p. 908)
- Journalism and Political Science (p. 195)
- Media and Screen Studies and Political Science (p. 163)
- Political Science and Communication Studies (p. 169)
- Political Science and Economics (p. 831)
- Political Science and Human Services (p. 931)
- Political Science and International Affairs (p. 990)
- Political Science and Philosophy (p. 1036)
- Sociology and Political Science (p. 1100)

### Bachelor of Science (BS)

- Political Science (p. 1102)
- Biology and Political Science (p. 603)
- Computer Science and Political Science (p. 371)
- Criminal Justice and Political Science (p. 787)
- Mathematics and Political Science (p. 697)
- Political Science and Business Administration (p. 284)
- Political Science and Communication Studies (p. 184)
- Political Science and Economics (p. 847)
- Political Science and Human Services (p. 942)
- Political Science and Philosophy (p. 1057)
- Politics, Philosophy, and Economics (p. 757)

## Minors

- Political Science (p. 1128)
- American Political Institutions (p. 1129)
- International Security Studies (p. 1129)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Political Science, BA

The Bachelor of Arts in Political Science provides a set of introductory courses to the discipline, followed by methodology courses, electives, and a capstone course. Students explore and analyze the many facets of American government, comparative politics, international relations, and political philosophy. With elective courses, students may choose from among a number of concentrations or follow their own curricular path. At the college level the Bachelor of Arts includes a foreign language requirement.

## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Introduction to College

Complete "Introduction to College" for your major.

### Political Science Major Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2330	American Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Capstone</b>		
Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Political Science Experiential Learning Requirement

Complete one course or experience from the following options. *Note:* Up to two credit-bearing courses count toward political science electives.

Code	Title	Hours
<b>Courses</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4942	Internship in Politics	
<b>Co-op or Study Abroad</b>		
Complete one cooperative education experience or one study-abroad experience.		4

### Political Science Electives

*Note:* You may use four courses from the elective area to fulfill a concentration.

Code	Title	Hours
Complete six political science electives with a minimum of four numbered 2000 or above.		24

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 1066).

- American political institutions (p. 1066)
- Campaigns and elections (p. 1066)
- Comparative politics (p. 1067)
- Identity, culture, and politics (p. 1067)
- International relations and diplomacy (p. 1067)
- Law and legal studies (p. 1067)
- Public policy (p. 1067)
- Security studies (p. 1067)

### Political Science Major Credit Requirement

Complete 52 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 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**  
**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	POLS 1150	4	Vacation	0	Vacation	0
POLS 1156	0	POLS 1151	0				
Elective	4	MATH 1215	4				
Foreign language core course	4	POLS 1160	4				
POLS 1000	1	POLS 1161	0				



ENGW 1111	4 Foreign language 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 elective	4	POLS elective					
Foreign language core course	4	Elective	4				
Elective	4	Elective	4				
EESH 2000	1						
		17	12	0			0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	ENVR 5210	4	Co-op	0
		ENVR 3300	4	Political Thought course	4		
		ENVR 3301	1				
		POLS elective	4				
		0	13	8			0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	POLS elective	4	POLS elective	4	Co-op	0
		POLS elective	4	POLS elective	4		
		Foreign language core course	4				
		0	12	8			0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	Elective	4
		Elective	4
		Elective	4
		Elective	4
	0	16	

Total Hours: 119

**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				
	16	16	0				0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	Co-op	0	Co-op	0	ECON 3423	4
POLS 1161	0						
Foreign language core course	4						
		8	0	0			4

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 3315	4	Co-op	0	Co-op	0	ENVR 5210	4
POLS 2400	4					Political Thought course	4
ENVR 3300	4						
ENVR 3301	1						
POLS elective	4						
		17	0	0			8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op	0	Co-op	0	Vacation	0
POLS elective	4						
Foreign language core course	4						
		12	0	0			0

**Year 5**

Fall	Hours	Spring	Hours
POLS 2395	4	Elective	4
Foreign language core course	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16	16	

Total Hours: 113

**English and Political Science, BA**

The Department of English and the Department of Political Science offer an interdisciplinary combined major in English and political science. Students in the combined major in English and political science integrate the study of literature and writing with the study of political issues and problems.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## English Requirements

Code	Title	Hours
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	

## English Electives

Two of the courses chosen from the lists below must be at the 3000 or 4000 level.

Code	Title	Hours
<b>Diversity</b>		
Complete one of the following. You may reuse this course to fulfil an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3685	Modern and Contemporary Jewish Literature	

### Pre-19th-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 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
or JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	

ENGL 4000	Topics in Early Literatures
ENGL 4020	Topics in 17th- and 18th-Century Literatures

### 19th-, 20th-, 21st-Century Literature

Complete one of the following:		4
<i>19th Century</i>		
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
<i>20th/21st Century</i>		
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL 3685	Modern and Contemporary Jewish Literature	
or 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 Writing	
ENGL 3700	Narrative Medicine	
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 Course

Complete one of the following:		4
ENGL 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	

1070 English and Political Science, BA

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 3487	Film and Text (Abroad)
ENGL 3582	Children's Literature
ENGL 3663	The African-American Novel
ENGL 3676	Representing Gender and Sexuality in Literature

**Writing**

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2780	Visual Writing: Writing Visuals
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Topics in Writing
ENGL 3382	Publishing in the 21st Century
ENGL 3384	The Writer's Marketplace

**English Electives**

Complete two English courses not used above. 8

**Political Science Requirements**

Code	Title	Hours
<b>Foundational Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political Thought**

Complete one of the following: 4

POLS 2325	Ancient Philosophy and Political Thought
POLS 2328	Modern Political Thought
POLS 2330	American Political Thought
POLS 2332	Contemporary Political Thought

**Political Science Electives**

Complete three courses in the following range: 12

POLS 2300 and above that are not fulfilling other POLS requirements

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- Campaigns and Elections (p. 875)
- Comparative Politics (p. 875)
- Identity, Culture, and Politics (p. 875)
- International Relations and Diplomacy (p. 875)
- Law and Legal Studies (p. 875)
- Public Policy (p. 875)
- Security Studies (p. 875)

**Supporting Courses for Political Science**

Code	Title	Hours
Complete one of the following to fulfill the prerequisite for POLS2400: 4		
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Integrative Requirements**

Code	Title	Hours
<b>English Integrative Requirement</b>		
Complete one of the following: 4		
ENGL 2740	Writing and Community Engagement	
ENGL 3426	Literature and Politics	
<b>Political Science Integrative Requirement</b>		
Complete one of the following: 4		
POLS 2368	Music and Politics in America and Abroad	
POLS 3320	Politics and Mass Media	
<b>Capstone</b>		
Complete one of the following: 4		
ENGL 4710	Capstone Seminar	
POLS 4701	Political Science Senior Capstone	
or POLS 4703	Senior Thesis	

**Major Credit Requirement**

88 semester hours required in the major

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample Five Years, Two Co-ops in Summer 2/Fall**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
				2	
ENGL 1000	1	ENGL 1160	4	Vacation	Vacation
		or			
		1410			
ENGL 1410	4	POLS 1160	4		

1072 Environmental Studies and Political Science, BA

POLS 1150	4	POLS 2400 prerequisite	4		
POLS 1*	4	English elective	4		
Elective	4				
		17	16	0	0

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGL pre-19th-century requirement	4	ENGL 19th-, 20th-, 21st-century requirement	4	Vacation		Co-op	
ENGL elective	4	ENGL theories and method requirement	4				
POLS elective	4	Elective	4				
POLS thought course	4	POLS 2*	4				
		16	16	0		0	

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ENGL comparative literature requirement	4	Vacation		Co-op	
		ENGL diversity requirement	4				
		Elective	4				
		POLS 2*	4				
		0	16	0		0	

Year 4

Fall	Hours	Spring	Hours	Summer Full Semester	Hours
Co-op		Elective	4	Vacation	
		ENGL elective	4		
		POLS elective	4		
		0	12		0

Year 5

Fall	Hours	Spring	Hours
Capstone	4	Integrative course	4
Elective	4	English writing requirement	4
POLS elective	4	Elective	4

POLS integrat course	4	Elective	4
		16	16

Total Hours: 125

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Environmental Studies Requirements**

Code	Title	Hours
<b>Social Science Component</b>		
<i>Philosophy</i>		
PHIL 1180	Environmental Ethics	4
<i>Sociology</i>		
SOCL 1246	Environment and Society	4
<i>Economics</i>		
ECON 1116	Principles of Microeconomics	4
ECON 3423	Environmental Economics	4
<b>Science Component</b>		
Complete one course in each of the following four subject areas:		
<i>Biology</i>		
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	5
<i>Earth and Environmental Sciences</i>		
Complete one of the following:		4
ENVR 1112	Environmental Geology	
ENVR 1200	Dynamic Earth	
<i>Environment</i>		
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
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4

**Political 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 four POLS Electives 2000 level or above	16
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**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 648)
- Campaigns and Elections (p. 648)
- Comparative Politics (p. 649)
- Identity, Culture, and Politics (p. 649)
- International Relations and Diplomacy (p. 649)
- Law and Legal Studies (p. 649)
- Public Policy (p. 649)
- Security Studies (p. 649)

**Integrative Courses**

Code	Title	Hours
<b>Integrative Courses</b>		
ENVR 5210	Environmental Planning	4
POLS 2395	Environmental Politics and Policy	4

**Capstone Requirement**

Complete one of the following:	1-8
ENVR 4900	Earth and Environmental Science Capstone
ENVR 4997	Senior Thesis
POLS 4701	Political Science Senior Capstone

**Environmental Studies and Political Science Combined Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		
POLS 2350	State and Local Politics	16
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4



**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 2375 Gender and Politics	
POLS 3309 Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324 Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910 Model United Nations		
POLS 4915 Model Arab League		
POLS 4938 Dialogue of Civilizations: International Politics Abroad		

**Core Courses**

Complete three of the following:	12
POLS 3405 International Political Economy	
POLS 3406 International Law	
POLS 3408 International Security	
POLS 3435 Politics and Governance of Europe and the European Union	
POLS 3470 Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330 American Political Thought		
POLS 3300 The U.S. Congress		
POLS 3302 Judicial Process and Behavior		
POLS 3324 Law and Society		
POLS 3406 International Law		
POLS 3409 Global Governance		
POLS 4500 U.S. Constitutional Law		
POLS 4505 U.S. Civil Liberties		

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307 Public Policy and Administration		4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430 Revolution, Civil War, and Insurrection		
POLS 3470 Arab-Israeli Conflict		
POLS 3487 Politics of Developing Nations		

**Plan of Study  
Five Years, Three Co-ops in Spring/Summer 1**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENGW 1111	4	MATH 1215	4	Vacation	0	Vacation
ENVR 1101	4	PHIL 1180	4			
POLS 1150	4	POLS 1155	4			
SOCL 1246	4	Foreign language course	4			
		16			16	0

Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ECON 1116	4	Co-op	0	Co-op	0	Elective
ENVR 1104, 1112, or 1200	4					Elective
POLS 1160	4					
Foreign language course	4					
		16			0	0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ECON 3423	4	Co-op	0	Co-op	0	Elective
POLS 2400	4					Elective
Foreign language course	4					
Political thought course	4					
		16			0	0

Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
ENGW 3315 or 3308	4	Co-op	0	Co-op	0	Vacation
ENVR 5210	4					
POLS undergraduate elective	4					
		16			0	0

Qualitative methods course	4-5			
	16-17	0	0	0

**Year 5**

Fall	Hours	Spring	Hours
POLS 2395	4	Capstone or elective	1-4
Capstone or elective	1-4	EEMB 2302 and EEMB 2303	5
		Elective	4
POLS undergraduate elective	4	POLS undergraduate elective	4
POLS undergraduate elective	4		
	13-16	14-17	

Total Hours: 123-130

**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	4	POLS 1155	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
ENVR 1104, 1112, or 1200	4	POLS 2400	4				
POLS 1160	4						
Foreign language course	4	Foreign language course	4				
		POLS undergraduate elective	4				
	16		16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Political thought course	4	Elective	4	Co-op	0
		EEMB 2302 and EEMB 2303 <sup>5</sup>	5	Elective	4		
		POLS undergraduate elective	4				

Qualitative methods course	4-5			
	0	17-18	8	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315 or 3308	4	Elective	4	Co-op	0
		ENVR 5210	4	Elective	4		
		Capstone or elective	1-4				
		POLS undergraduate elective	4				
	0	13-16	8				0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	POLS 2395	4
		Capstone or elective	1-4
		Elective	4
		POLS undergraduate elective	4
	0	13-16	

Total Hours: 123-130

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**History Major Requirements**

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level Course</b>		
Complete one course from HIST 1001 to HIST 1999		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one of the following:		4
HIST 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	
<b>Intermediate/Advanced History Cluster</b>		
Complete three HIST courses numbered 2300 or above. Cluster is subject to department approval.		12
<b>Advanced History</b>		
Complete one HIST course numbered 3000 or above.		4

**Political Science Major Requirements**

Code	Title	Hours
<b>Political Science Foundation Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete three POLS courses numbered 2300 or above.		12

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 910).

- American political institutions (p. 910)
- Campaigns and elections (p. 910)
- Comparative politics (p. 910)
- Identity, culture, and politics (p. 910)
- International relations and diplomacy (p. 910)
- Law and legal studies (p. 910)

- Public policy (p. 910)
- Security studies (p. 911)

**Supporting Courses**

Code	Title	Hours
Complete one of the following:		
MATH 1213	Interactive Mathematics	4
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
Complete one of the following:		4
HIST 1130	Introduction to the History of the United States	
HIST 2211	The World Since 1945	
HIST 2282	The Holocaust and Comparative Genocide	
HIST 3800	American Conservatism from the New Deal to the Present	

**Capstone**

Complete one of the following. (Public History concentrations take HIST 4903 & HIST 4904)		4
HIST 4701	Capstone Seminar	
HIST 4903	Fieldwork in History 1	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**History and Political Science Major Credit Requirement**

Complete 78 semester hours in the major.

**Program Requirements**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		
POLS 2350	State and Local Politics	16
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:	8
POLS 2345 Urban Policies and Politics	
POLS 2350 State and Local Politics	
POLS 2355 Intergovernmental Relations	
POLS 3310 Public Opinion, Voting, and Elections	
POLS 3162 Local Campaigns and Elections	
POLS 3320 Politics and Mass Media	
POLS 3304 Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370 Religion and Politics		
POLS 3418 Nationalism		
POLS 3430 Revolution, Civil War, and Insurrection		
POLS 3487 Politics of Developing Nations		
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435 Politics and Governance of Europe and the European Union		
POLS 3465 Government and Politics in the Middle East		
POLS 3470 Arab-Israeli Conflict		
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915 Model Arab League		
POLS 4918 Model NATO		
POLS 4937 Dialogue of Civilizations: Government and Politics Abroad		

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418 Nationalism		4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360 Politics of Poverty		
POLS 2368 Music and Politics in America and Abroad		
POLS 2370 Religion and Politics		
POLS 2375 Gender and Politics		
POLS 3309 Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy		
POLS 3324 Law and Society		

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910 Model United Nations		
POLS 4915 Model Arab League		

POLS 4938 Dialogue of Civilizations: International Politics Abroad

<b>Core Courses</b>		Hours
Complete three of the following:		12
POLS 3405 International Political Economy		
POLS 3406 International Law		
POLS 3408 International Security		
POLS 3435 Politics and Governance of Europe and the European Union		
POLS 3470 Arab-Israeli Conflict		

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330 American Political Thought		
POLS 3300 The U.S. Congress		
POLS 3302 Judicial Process and Behavior		
POLS 3324 Law and Society		
POLS 3406 International Law		
POLS 3409 Global Governance		
POLS 4500 U.S. Constitutional Law		
POLS 4505 U.S. Civil Liberties		

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307 Public Policy and Administration		4
<b>Electives</b>		
Complete three of the following:		12
POLS 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
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 3408 International Security		
POLS 3420 U.S. National Security Policy		
POLS 3423 Terrorism and Counterterrorism		
POLS 3425 U.S. Foreign Policy		
POLS 3430 Revolution, Civil War, and Insurrection		
POLS 3470 Arab-Israeli Conflict		
POLS 3487 Politics of Developing Nations		

## Plan of Study

### Year 1

Fall	Hours	Spring	Hours
ENGW 1111	4	POLS 1160	4
POLS 1155	4	POLS Thought course	
POLS 1150	4		
12		4	

### Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS Thought		Co-op		Co-op		Foreign Language	
POLS 2399	4						
Foreign Language							
4		0		0		0	

### Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective		Co-op		Co-op		POLS elective	
PHIL 5001	4						
POLS 2400	4						
8		0		0		0	

### Year 4

Fall	Hours
POLS upper elective	
POLS upper elective	
POLS Thought course	
0	

Total Hours: 28

## Journalism and Political Science, BA

This interdisciplinary combined major offers students an opportunity to integrate the study and practice of journalism and political science. Successful students will gain a deep understanding of both disciplines, allowing them to seek out areas such as political writing, campaigns, and law school.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

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. 757).

### Journalism Major Requirements

Code	Title	Hours
<b>Journalism Introductory Course</b>		
JRNL 1150	Understanding Today's News	4
<b>Journalism Foundations</b>		
Must receive a C or better in the following:		
JRNL 1101 and JRNL 1102	Journalism 1: Fundamentals of Reporting and Journalist's Toolbox	5
JRNL 2201	Journalism 2: Intermediate Reporting	4
JRNL 2301	Visual Storytelling in Journalism	4
JRNL 3610	Digital Storytelling and Social Media	4
<b>Ethics</b>		
JRNL 4650	Ethics and Issues in Journalism	4
<b>Journalism Electives</b>		
Take three JRNL courses.		12

### Political Science Requirements

Code	Title	Hours
<b>Political Science Foundation Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Capstone or Thesis</b>		
Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Political Science Electives

Complete three POLS electives or complete a concentration from the following list: POLS 2000 to POLS 5999	12
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### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American political institutions (p. 196)
- Campaigns and elections (p. 196)
- Comparative politics (p. 196)
- Identity, culture, and politics (p. 197)
- International relations and diplomacy (p. 197)
- Law and legal studies (p. 197)
- Public policy (p. 197)
- Security studies (p. 197)

### Integrative Requirement

Code	Title	Hours
JRNL 3550	The First Amendment and the Media	4
COMM 3320 or POLS 3320	Political Communication Politics and Mass Media	4

### Journalism and Political Science Combined Major Credit Requirement

Complete 84 semester hours in the major.

### Program Requirement

129 total semester hours required

### Concentrations

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

#### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	



POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample 4 Years, 2 Co-ops**

**Summer 2/Fall**

Year 1	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Fall	JRNL 1000	1	JRNL 2201	4	Foreign language	4	Foreign language	4
	JRNL 1101 and JRNL 1102	5	POLS 1155	4	Elective	4	Elective	4

JRNL 1150	4	POLS 1160	4		
POLS 1150	4	Foreign language	4		
ENGW 1111	4				
		18	16	8	8

Year 2	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Fall	JRNL 3550	4	JRNL 2301	4	Elective	4	Co-op	0
	Journalism elective 1	4	Journalism elective 2	4	Elective	4		
	POLS 2399	4	POLS 2400	4				
	Political science elective 1	4	Political science elective 2	4				
			EEAM 2000 or EESH 2000	1				
		16	17	8			0	

Year 3	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Fall	Co-op	0	JRNL 3610	4	Elective	4	Co-op	0
			Journalism elective 3	4	Elective	4		
			Political thought requirement	4				
			Political science elective 3	4				
		0	16	8			0	

Year 4	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Fall	Co-op	0	JRNL 4650	4			
			POLS 4701 or 4703	4			
			POLS 3320 or COMM 3320	4			
			Elective	4			
		0	16				0

Total Hours: 131

**Political Science and Communication Studies, BA**

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete the core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Methodology</b>		
POLS 2399	Research Methods in Political Science	4
or COMM 2301	Communication Research Methods	
<b>Political Science Upper-Division Electives</b>		
Complete two courses in the following range:		8
POLS 3300 to POLS 5999		
<b>Political Science Electives</b>		
Complete two courses in the following range:		8
POLS 2000 to POLS 5999		

### Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 170).

- American Political Institutions (p. 170)
- Campaigns and Elections (p. 171)
- Comparative Politics (p. )
- Identity, Culture, and Politics (p. 171)
- International Relations and Diplomacy (p. )
- Law and Legal Studies (p. 171)
- Public Policy (p. 171)
- Security Studies (p. )

### Communication Studies Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

### Communication Studies Electives

Code	Title	Hours
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 additional communication studies courses.	12
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### Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3320	Politics and Mass Media	4
or COMM 3320	Political Communication	
<b>Capstone Requirement</b>		
Complete one of the following. This course also counts toward the political science or communication studies elective requirement:		4
COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	

COMM 4533	Consultation Skills
COMM 4602	Contemporary Rhetorical Theory
COMM 4608	Strategic Communication Capstone
COMM 4625	Online Communities
COMM 4755	Production Capstone
POLS 4701	Political Science Senior Capstone
POLS 4703	Senior Thesis

### Political Science and Communication Studies Combined-Major Credit Requirement

Complete 84 semester hours in the major.

### Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

### Program Requirement

128 total semester hours required

### Concentrations

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

#### Campaigns and Elections Electives

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2360	Politics of Poverty	

POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

#### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 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

#### Sample Four Years, Two Co-ops

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1000 or COMM 1000	1	POLS 1155	4	Communication Studies Foundation Course	4	Communication Studies Cluster Course	4
POLS 1150	4	COMM 1112 or 2301	4	Communication Studies Elective	4	Elective	4
COMM 1101	4	Foreign Language 2	4				
ENGW 1111	4	Foreign Language 1	4				
		17		16		8	
						8	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2400	4					Elective	4
Communication Studies Elective	4						
Foreign Language Culture Course	4						
EESH 2000 or EEAM 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Political Thought Course	4	Co-op		Co-op		Communication Studies Writing Intensive	4
POLS 2399 or COMM 2301	4					Political Science Elective	4
Communication Studies Elective	4						
POLS Upper-Division Elective 1	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours
POLS Upper-Division Elective 2	4	Capstone	4
Political Science Elective	4	Elective	4
Integrative Course	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Creative Expression/Innovation (EI) and Difference and Diversity (DD) may be met through electives in the major.

NUpath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

**Media Studies Requirements**

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	
<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	
<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

## Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following (NUPath capstone recommendation: Complete MSCR 4623 as one of your MSCR electives if a political science capstone is not taken for a political science elective):		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

## Political Science Requirements

Code	Title	Hours
<b>Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Politics in Media/Art</b>		
Complete two courses. Consult academic adviser for additional courses.		8
POLS 2368	Music and Politics in America and Abroad	
<b>Elective Courses</b>		
Complete two POLS courses or complete a concentration.		8
NUPath capstone recommendation: Complete a POLS capstone course as one of your POLS electives if MSCR 4623 is not taken for a MSCR elective.		

## Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 164)
- Campaigns and Elections (p. 164)
- Comparative Politics (p. 164)
- Identity, Culture, and Politics (p. 165)
- International Relations and Diplomacy (p. 165)
- Law and Legal Studies (p. 165)
- Public Policy (p. 165)
- Security Studies (p. 165)

## Integrative Requirements

Code	Title	Hours
<b>Required Courses</b>		
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 AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

**Experiential/Practicum Requirement**

Complete one of the following: 4

POLS 4915	Model Arab League
POLS 4918	Model NATO
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
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 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	

POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study  
Sample Four Years, Two Co-ops**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign Language	4	Elective	4
MSCR 1220	4	POLS 1155	4	Elective	4	Elective	4
POLS 1150	4	MSCR foundation	4				
ENGW 1111	4	Foreign Language	4				
Foreign Language	4						
		17			16		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	Co-op	4	Co-op	4	Elective	4
POLS 2400	4					Elective	4



1086 Political Science and Economics, BA

MSCR diversity/globalization	4			
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 writing-intensive	4	Elective	4	Co-op	
MSCR writing-intensive	4	Politics in media/art elective	4	Elective	4		
MSCR elective	4	MSCR elective	4				
POLS 3320	4	POLS elective	4				
	16		16		8		0

**Year 4**

Fall	Hours	Spring	Hours
Co-op		Politics in media/art elective	4
		POLS elective	4
		Elective	4
		MSCR 4602	4
	0		16

Total Hours: 130

**Political Science and Economics, BA**

The combined major in political science and economics offers students the opportunity to integrate the study of politics and government with the study of economics. Students complete the core courses in political science along with core courses in economics that cover both macroeconomic and microeconomic perspectives. This combined major highlights the important role that the economy plays in shaping politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		
POLS 2330	American Political Thought	4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four courses POLS2000 to POLS5999		16

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. ).

- American Political Institutions (p. 832)
- Campaigns and Elections (p. 832)
- Comparative Politics (p. 832)
- Identity, Culture, and Politics (p. 832)
- International Relations and Diplomacy (p. 832)
- Law and Legal Studies (p. 833)
- Public Policy (p. 833)
- Security Studies (p. 833)

**Economics Requirements for BA**

Code	Title	Hours
<b>Breadth Courses</b>		
MATH 1231	Calculus for Business and Economics	4
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	
<b>Required Economics Courses</b>		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 3520	History of Economic Thought	4
<b>Economics Electives</b>		

Complete 3 Economics elective courses that are found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range. Additionally, ECON 3520 may not be used as an Economics elective:

- ECON 1200 to ECON 1999
- ECON 3000 to ECON 4689
- ECON 4900 to ECON 4999
- ECON 5200 to ECON 5999

### Supporting Courses

Complete either of the statistics and departmental elective combinations listed below:

#### COMBINATION A

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		
Complete one course within the following ranges, excluding ECON 3520. This course may not also be used as an Economics elective:		4
ECON 1200 to ECON 1999		
ECON 3000 to ECON 4689		
ECON 4900 to ECON 4999		
ECON 5200 to ECON 5999		

#### COMBINATION B

Code	Title	Hours
<b>Statistics</b>		
ECON 2350	Statistics	4
<b>Political Science</b>		
Complete one course in the following range:		4
POLS 2401 to POLS 5999		

### Integrative Requirements

Code	Title	Hours
<b>Senior Seminar/Capstone</b>		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

### Combined Major GPA/Credit Requirement

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	

### Program Requirement

128 total semester hours required

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4

**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 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	

**Core Courses**

Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Four Years, Two Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	MATH 1231	4	Elective	4	Elective	4
POLS 1155	4	POLS 1150	4	Elective	4	Elective	4
ECON 1115	4	CS 1100	4				
Elective	4	ECON 1116	4				
		16		16		8	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	POLS 2400 or ECON 2350	4	Elective	4	Co-op	0
POLS elective	4	POLS elective	4	Political Theory Course	4		
ECON 2315	4	ECON 2316	4				
		Elective	4				
ECON elective 1	4						
		16		16		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	ECON elective 3	4	Co-op	0
		POLS elective	4	ENGW 3315	4		
		ECON elective 2	4				
		ECON 3520	4				
		0		16		8	

Year 4			
Fall	Hours	Spring	Hours
Co-op		POLS 4701, 4703, or ECON 4692	4
		Elective	4

ECON 4  
or POLS  
elective (See  
Supporting  
Courses,  
Combinations  
A and B.)

Elective 4

0 16

Total Hours: 128

## Political Science and Human Services, BA

The combined degree is designed to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students prepare for fields in the social change arena (nongovernment organizations [NGOs], counseling, and political advocacy). Political science students prepare to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that emphasizes experiential approaches to learning through service-learning, co-op, internship, and study-abroad opportunities. Upon completion of the degree, successful students apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are positioned to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

POLS 2400 Quantitative Techniques 4

### Political Thought

Complete one of the following: 4

POLS 2325 Ancient Philosophy and Political Thought

POLS 2328 Modern Political Thought

POLS 2330 American Political Thought

POLS 2332 Contemporary Political Thought

### Political Science Electives

Complete three courses in the following range: 12

POLS 2000 to POLS 5999

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 932)
- Campaigns and Elections (p. 932)
- Comparative Politics (p. 932)
- Identity, Culture, and Politics (p. 932)
- International Relations and Diplomacy (p. 933)
- Law and Legal Studies (p. 933)
- Public Policy (p. 933)
- Security Studies (p. 933)

### Supporting Course for Political Science

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

### Human Services Requirements

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6
<b>Human Services and Diverse Populations</b>		
Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

**Human Services Electives**  
Complete three HUSV courses. 12

**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3307	Public Policy and Administration	4
HUSV 3900	Social Policy	4
<b>Research Methods</b>		
Complete one of the following:		4
POLS 2399	Research Methods in Political Science	
HUSV 2970	Research Methods for Human Services	
<b>Capstone and Elective</b>		
Complete one of the following options:		8
<i>Option A</i>		
Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:		
POLS 4701	Political Science Senior Capstone	
or POLS 4703	Senior Thesis	
HUSV 2000 to HUSV 5999		
<i>Option B</i>		
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

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	

POLS 3310	Public Opinion, Voting, and Elections
POLS 3162	Local Campaigns and Elections
POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	

POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

HUSV 1101	4 Foreign Language	4
HUSV elective	4	
		0
		16

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESH 2000	1	Co-op		Co-op		Foreign language	4
POLS thought	4					POLS 2400 supporting course	4
HS Diverse Populations Course	4						
Research Methods course	4						
HUSV elective	4						
						8	
						17	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 2400	4	Co-op		Co-op		POLS elective	4
Foreign Language	4					HUSV elective	4
POLS 3307	4						
HUSV 3900	4						
						8	
						16	

**Year 4**

Fall	Hours	Spring	Hours
Capstone and Elective	8	POLS elective	4
HUSV470C + 1 POLS course (Option A) or POLS4701 (Or POLS4703 and 1 HUSV course (Option B))			
POLS elective	4	HUSV 3570	4
Foreign language	4	Elective	4
		Elective	
		4	
		16	

**CONCENTRATION IN SECURITY STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1155	4	POLS 1150	4		
ENGW 1111	4	POLS 1160	4		
HUSV 1000 or POLS 1000	1	HUSV 2300	4		

**Year 5**

Fall	Hours
HUSV 4994	6
Elective	4



Elective	4
14	
Total Hours: 128	

## Political Science and International Affairs, BA

Through this combined major, successful undergraduates will develop an awareness of global affairs and international relations since the early 20th century. The combined major addresses diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; political processes, institutions, and actors; and state-society relations (democracy, authoritarianism, inequalities, citizenship).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

### Political Science Electives/Concentration for BA

Complete four upper-division political science electives, or complete one of the following concentrations. If you are working toward a concentration, declare it with your adviser in order for it to be added to your record.

Code	Title	Hours
<b>Political Science Electives</b>		
Complete four political science courses at or above POLS 2000.		16

- American Political Institutions (p. 993)
- Campaigns and Elections (p. 993)
- Comparative Politics (p. 993)
- Identity, Culture, and Politics (p. 993)
- International Relations and Diplomacy (p. 993)
- Law and Legal Studies (p. 994)
- Public Policy (p. 994)
- Security Studies (p. 994)

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4
HIST 2211	The World Since 1945	4
or HIST 2311	Colonialism/Imperialism	
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	

### International Affairs Elective

Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	

### Global Dynamics

Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements.		4
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#### Environment

ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	

#### Law, Diplomacy, and Global Governance

COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	

*Human Rights and Social Justice*

INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
HIST 2373	Gender and Sexuality in World History
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO

*Globalization*

ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies

*Population, Migration, and Diaspora*

AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam

*Development*

ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History
INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

*Communication and Media*

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

**International 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 adviser. See department for additional courses:		12

**Africa**

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa

AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times

**Asia**

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
INTL 4350	Ethnography of Southeast Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
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 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Requirements**

Code	Title	Hours
<b>Research Methods</b>		
POLS 2399	Research Methods in Political Science	4
or INTL 2718	Research Methods in International Affairs	
<b>Capstone</b>		
Complete one of the following:		4
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

INTL 4700 Senior Capstone Seminar in International Affairs

**Political Science and International Affairs Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		

Complete one of the following: 4

POLS 4915	Model Arab League
POLS 4918	Model NATO
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following: 12		
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following: 16		
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following: 12		

1096 Political Science and International Affairs, BA

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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	HIST 2211	4	Vacation	0	Vacation	0
MATH 1215	4	POLS 1150	4				
POLS 1155	4	Foreign language core course	4				
INTL 1101	4	POLS 1160	4				
POLS 1000	1						
		17		16		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 3290	4	INTL undergraduate elective	4	Vacation	0	Co-op	0
POLS undergraduate elective	4	POLS 2400	4				
POLS Thought course	4	POLS undergraduate elective	4				
Foreign language core course	4	Foreign language core course	4				
		16		16		0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL 3400	4	INTL undergraduate elective	4	Co-op	0

POLS undergraduate elective	4	POLS undergraduate elective	4
INTL undergraduate elective	4		
ENGW 3315	4		
		0	
		16	
			8
			0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL undergraduate elective	4	Elective	4	Co-op	0
		INTL undergraduate elective	4	Elective	4		
		POLS undergraduate elective	4				
		Elective	4				
		0		16		8	0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	INTL 4700	4				
		Elective	4				
		Elective	4				
		Elective	4				
		0		16		8	0

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	HIST 2211	4	Vacation	0	Vacation	0
MATH 1215	4	Foreign language core course	4				
POLS 1155	4	POLS 1150	4				
INTL 1101	4	POLS 1160	4				
POLS 1000	1						
		17		16		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 3290	4	Co-op	0	Co-op	0	POLS undergraduate elective	4
Foreign language core course	4					INTL undergraduate elective	4
POLS Thought course	4						
POLS undergraduate elective	4						
		16		0		0	8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL undergraduate elective	4	Co-op	0	Co-op	0	INTL undergraduate elective	4
POLS 2400	4					POLS undergraduate elective	4
POLS undergraduate elective	4						
Foreign language core course	4						
	16		0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op	0	Co-op	0	Vacation	0
POLS undergraduate elective	4						
INTL undergraduate elective	4						
ENGW 3315	4						
	16		0		0		0

Year 5			
Fall	Hours	Spring	Hours
INTL undergraduate elective	4	INTL 4700	4
POLS undergraduate elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

## Political Science and Philosophy, BA

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Successful students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4

#### Political Thought

Complete two of the following:		8
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

#### Political Science Electives

Complete four courses in the following range:		16
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. 1037).

- American Political Institutions (p. 1037)
- Campaigns and Elections (p. 1037)
- Comparative Politics (p. 1037)
- Identity, Culture, and Politics (p. 1037)
- International Relations and Diplomacy (p. 1037)
- Law and Legal Studies (p. 1037)
- Public Policy (p. 1038)
- Security Studies (p. 1038)

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4



PHIL 2303 Social and Political Philosophy 4

**Philosophy Restricted Electives**

Complete two of the following (not used to fulfill another requirement): 8

PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life
PHIL 3343	Existentialism
PHIL 3360	Scientific Approaches to Philosophy
PHIL 3435	Moral Philosophy
PHIL 3460	Philosophy and Literature
PHIL 4500	Theory of Knowledge
PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4901	Topics in Philosophy Seminar
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Additional Electives**

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Program Requirement**

128 semester hours required

**Concentrations**

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following: 4		
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following: 8		
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following: 4		
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following: 12		
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following: 4		
POLS 4910	Model United Nations	

POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**  
**Five Years, Three Co-ops in Spring/Summer 1**

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours	
POLS 1000	1	POLS 1150	4	PHIL 2325 or POLS 2325	4	
POLS 1155	4	POLS 1160	4	PHIL Restricted Elective	4	
ENGW 1111	4	Foreign Language		4		
PHIL 1115	4	MATH 1215	4			
POLS elective	4					
		17	16		8	
Year 2						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
POLS Thought	4	Co-op		Co-op		Foreign Language
POLS 2399	4					Elective
Foreign Language	4					
PHIL 2330	4					
		16	0		0	
8						
Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	
		Co-op		Co-op		
PHIL 2303	4					
PHIL 5001	4					
POLS 2400	4					
PHIL Restricted Elective	4					
		16	0		0	
Year 4						
Fall	Hours	Spring	Hours	Summer 1	Hours	
POLS elective	4	Co-op		Co-op		
POLS elective	4					
POLS Thought course	4					
PHIL Elective	4					
		16	0		0	
Year 5						
Fall	Hours	Spring	Hours	Summer 1	Hours	
PHIL Elective	4	Elective	4	4		
PHIL Elective	4	Elective	4	4		
POLS Elective	4	Elective	4	4		

Elective	4 PHIL Elective	4
	16	16

Total Hours: 129

## Sociology and Political Science, BA

The combined major in sociology and political science offers students the opportunity to integrate the study of politics and government with an analysis of social systems. Students complete core courses in political science along with core courses in sociology that include social theory and an introduction to social systems. This combined major highlights the important intersection between social norms and organizations with the evolution of politics and government.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2268	Social Movements	4
SOCL 3300	Social Theory	4
SOCL 3450	Class, Power, and Social Change	4
<b>Sociology Introductory Electives</b>		
Complete two courses in the following range:		8
SOCL 1200 to SOCL 1999		
<b>Sociology Intermediate Elective</b>		
Complete one course in the following range:		4
SOCL 2000 to SOCL 3999		
<b>Sociology Advanced Elective</b>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 5999		
<b>Statistics and Methods</b>		
Complete one of the following sets:		8
SOCL 2320 and SOCL 2321	Statistical Analysis in Sociology and Research Methods in Sociology	

POLS 2400 and POLS 2399	Quantitative Techniques and Research Methods in Political Science
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### Political Science Requirements

Code	Title	Hours
<b>Political Science Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete five courses in the following range:		20
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1101)
- Campaigns and Elections (p. 1101)
- Comparative Politics (p. 1101)
- Identity, Culture, and Politics (p. 1101)
- International Relations and Diplomacy (p. 1101)
- Law and Legal Studies (p. 1101)
- Public Policy (p. 1101)
- Security Studies (p. 1102)

### 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 Inequalities	4
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 3320	Politics and Mass Media	
POLS 3324	Law and Society	
POLS 3418	Nationalism	

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Program Requirement

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4

**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 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Political Science, BS**

The Bachelor of Science in Political Science provides a set of introductory courses to the discipline, followed by methodology courses, electives, and a capstone course. Students explore and analyze the many facets of American government, comparative politics, international relations, and political philosophy. With elective courses, students may choose from among a number of concentrations or follow their own curricular path.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Introduction to College**

Complete "Introduction to College" for your major.

**Political Science Major Requirements**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	

POLS 2330	American Political Thought
POLS 2328	Modern Political Thought
POLS 2332	Contemporary Political Thought

**Political Science Capstone**

POLS 4701	Political Science Senior Capstone	4
or POLS 4703	Senior Thesis	

**Political Science Experiential Learning Requirement**

Code	Title	Hours
Note: Up to two credit-bearing courses count toward political science electives.		
Complete one course or experience from the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4942	Internship in Politics	

**Co-op or Study Abroad**

Complete one cooperative education experience or one study-abroad experience.	4
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**Political Science Electives**

Note: You may use four courses from the elective area to fulfill a concentration.

Code	Title	Hours
Complete eight political science electives with a minimum of six numbered 2000 or above.		32

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. 1103).

- American Political Institutions (p. 1103)
- Campaigns and Elections (p. 1103)
- Comparative Politics (p. 1103)
- Identity, Culture, and Politics (p. 1103)
- International Relations and Diplomacy (p. 1103)
- Law and Legal Studies (p. 1103)
- Public Policy (p. 1103)
- Security Studies (p. 1104)

**Political Science Major Credit Requirement**

Complete 60 semester hours in the major.

**Upper-Division Electives**

Code	Title	Hours
Note: Courses used as upper-division electives do not count toward the major or the NU Core.		
Complete three general electives numbered 3000 or above.		12

**Program Requirements**

128 total semester hours required

**Concentrations****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
<b>Core Requirement</b>		
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	POLS 1150	4	Vacation	0	Vacation	0
POLS 1156	0	POLS 1151	0				
Elective	4	MATH 1215	4				
Elective	4	Elective	4				
POLS 1000	1	POLS 1160	4				
ENGW 1111	4						
		17		16		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 2399	4	POLS 2400	4	Vacation	0	Co-op	0
POLS intermediate/advanced undergraduate elective	4	Elective	4				
Elective	4	POLS intermediate/advanced undergraduate elective	4				
Elective	4	Elective	4				
EESH 2000	1	EESH 2000	1				
		17		17		0	0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Political theory course	4	POLS intermediate/advanced undergraduate elective	4	Co-op	0
		POLS intermediate/advanced undergraduate elective	4	Elective	4		

Elective	4				
Elective	4				
0		16		8	0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Upper-division elective	4	Co-op	0

POLS intermediate/advanced undergraduate elective	4	POLS intermediate/advanced undergraduate elective	4		
Upper-division elective	4				
Elective	4				
0		16		8	0

Year 5			
Fall	Hours	Spring	Hours
Co-op	0	POLS 4701 (or POLS 4703 Senior Thesis)	4

POLS intermediate/advanced undergraduate elective	4		
Upper-division elective	4		
Elective	4		
0		16	

Total Hours: 131

**Five Years, Three Co-ops in Spring/Summer 1**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	POLS 1150	4	Vacation	0	Vacation	0
POLS 1156	0	POLS 1151	0				
Elective	4	MATH 1215	4				
Elective	4	Elective	4				
POLS 1000	1	POLS 1160	4				
ENGW 1111	4						
		17		16		0	0

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 2399	4	Co-op	0	Co-op	0	Elective	4
Elective	4					Elective	4
POLS intermediate/advanced undergraduate elective	4						

POLS intermediate/ advanced undergraduate elective	4					
EESH 2000	1					
	17	0	0			8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Political theory course	4	Co-op	0	Co-op	0	POLS intermediate/advanced undergraduate 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 intermediate/ advanced undergraduate elective	4						
Upper-division elective	4						
Elective	4						
	16	0	0				0

**Year 5**

Fall	Hours	Spring	Hours
POLS intermediate/ advanced undergraduate elective	4	POLS 4701 (or POLS 4703 Senior Thesis)	4
POLS intermediate/ advanced undergraduate elective	4	POLS intermediate/ advanced undergraduate elective	4
Upper-division elective	4	Upper-division elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**Biology and Political Science, BS**

In the BS, combined biology and political science degree program, science courses lay the groundwork for strong basic training in mathematics, chemistry, and physics that are relevant to biology. In biology courses, students broadly explore the organization and processes of life—from molecules and cells through organs and organ systems to populations, ecosystems, and evolution. In political science courses, students pursue core concepts of American government, comparative

politics, international relations and political thought. 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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Biology Requirements**

Code	Title	Hours
<b>Introduction to College</b>		
BIOL 1000 or POLS 1000	Biology at Northeastern Political Science at Northeastern	1
<b>Biology</b>		
<i>Foundations</i>		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
<i>Inquiries</i>		
BIOL 2299	Inquiries in Biological Sciences	4
<i>Genetics</i>		
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
<i>Project Lab</i>		
BIOL 2309	Biology Project Lab	4
<i>Biochemistry</i>		
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
<b>Intermediate/Advanced Biology</b>		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 5999		
<b>Organismal and Population Biology Elective</b>		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3403	Animal Behavior	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 3421 and BIOL 3422	Microbiology and Lab for BIOL 3421	

EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2616 and EEMB 2617	Invertebrate Zoology and Lab for EEMB 2616	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	
EEMB 3460	Conservation Biology	

**Mathematics**

MATH 1251	Calculus and Differential Equations for Biology 1	4
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**Chemistry***General Chemistry*

CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
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*Organic Chemistry*

CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
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CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
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**Physics**

PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5
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PHYS 1147 and PHYS 1148	Physics for Life Sciences 2 and Lab for PHYS 1147	5
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**Political Science Requirements**

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4

**Statistics**

Complete one of the following:		4-5
POLS 2400	Quantitative Techniques	
ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	

**Political Thought**

Complete one of the following:		4
POLS 2328	Modern Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Elective**

Complete five POLS courses 2000 and above.		20
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**Political Science Concentration (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 604)
- Campaigns and Elections (p. 604)
- Comparative Politics (p. 604)
- Identity, Culture, and Politics (p. 604)

- International Relations and Diplomacy (p. 604)
- Law and Legal Studies (p. 605)
- Public Policy (p. 605)
- Security Studies (p. 605)

**Integrative Requirement and Capstone**

Note: Science, Technology, and Public Policy (POLS 2390) and Environmental Politics and Policy (POLS 2395) cannot be used both as an integrative course and as an elective above.

Code	Title	Hours
<b>Integrative Requirement</b>		
POLS 2390 or POLS 2395	Science, Technology, and Public Policy Environmental Politics and Policy	4
<b>Capstone</b>		
BIOL 4701 or POLS 4701	Biology Capstone Political Science Senior Capstone	4

**Program Requirement**

136 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		
POLS 2350	State and Local Politics	16
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		
POLS 2345	Urban Policies and Politics	8
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		
POLS 2370	Religion and Politics	4
POLS 3418	Nationalism	

POLS 3430	Revolution, Civil War, and Insurrection
POLS 3487	Politics of Developing Nations

**Regional Requirements**  
Complete two of the following: 8

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict

**Experiential/Practicum Requirement**  
Complete one of the following: 4

POLS 4915	Model Arab League
POLS 4918	Model NATO
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
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<b>Core Course</b>		
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 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
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**Experiential/Practicum Requirement**

Complete one of the following: 4

POLS 4910	Model United Nations
POLS 4915	Model Arab League
POLS 4938	Dialogue of Civilizations: International Politics Abroad

**Core Courses**

Complete three of the following: 12

POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
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Complete four of the following: 16

POLS 2330	American Political Thought
POLS 3300	The U.S. Congress
POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 3406	International Law

POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
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**Core Requirement**

POLS 3307	Public Policy and Administration	4
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**Electives**

Complete three of the following: 12

POLS 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
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Complete four of the following: 16

POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4
<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1
<b>Khoury Elective Courses</b>		
With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 12 credits of upper-division CS, CY, DS, or IS courses that are not already required. Choose courses within the following ranges:		12
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
IS 2000 or higher, except IS 4900		
<b>Political Science Courses</b>		
Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Capstone</b>		
POLS 4701	Political Science Senior Capstone	4
<b>Political Science Electives</b>		

Complete four courses in the following range: 16  
POLS 2000 to POLS 5999

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 373)
- Campaigns and Elections (p. 373)
- Comparative Politics (p. 373)
- Identity, Culture, and Politics (p. 373)
- International Relations and Diplomacy (p. 373)
- Law and Legal Studies (p. 373)
- Public Policy (p. 373)
- Security Studies (p. 374)

## Integrative Requirement

Code	Title	Hours
<b>Integrative Requirement</b>		
Complete one of the following:		4
POLS 2390	Science, Technology, and Public Policy	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

## Supporting Courses

Code	Title	Hours
Complete one of the following: 4		
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
ENGL 2150	Literature and Digital Diversity	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300 or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 3485	Environment, Technology, and Society	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 4528	Computers and Society	

## Computer Science Writing Requirement

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing or First-Year Writing for Multilingual Writers	4
<b>Advanced Writing in the Disciplines</b>		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3311	Advanced Writing for Prelaw	

ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines
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**Required General Electives**

Code	Title	Hours
Complete 28 credits of general electives.		28

**Khoury College GPA Requirement**

Minimum 2.000 GPA required in all CS, CY, DS, and IS courses

**Computer Science and Political Science Major Credit Requirement**

100 semester hours required in the major

**NUpath Requirements Satisfied**

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing in the First Year
- Writing-Intensive in the Major
- Advanced Writing in the Disciplines
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

**Program Requirement**

133 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	

POLS 2355	Intergovernmental Relations
POLS 3310	Public Opinion, Voting, and Elections
POLS 3162	Local Campaigns and Elections
POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	



POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

**Sample Patterns:**

**Four Year, Two Co-ops in Summer 2/Fall**

Year 1	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Fall							
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 2500 and CS 2501	5	IS 2000	4	CS 3500	4		

CS 1200	1	ENGW 1111	4				
POLS 1150 and POLS 1151	4	POLS 1160	4				
POLS 1155 and POLS 1156	4						
	19		17		8		0

Year 2	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Fall							
CS 3000	4	CS 1210	1	ENGW 3302, 3308, 3311, or 3315	4	Co-op	
POLS 2399	4	Khoury elective 1	4	Elective	4		
POLS theory elective	4	POLS 2400	4				
Elective	4	POLS elective 1	4				
		Elective	4				
	16		17		8		0

Year 3	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Fall							
Co-op		Khoury elective 2	4	Elective	4	Co-op	
		POLS elective 2	4	Elective	4		
		POLS elective 3	4				
		Computing and social issues requirement	4				
		THTR 1170	1				
	0		17		8		0

Year 4	Hours	Spring	Hours	Summer 1	Hours
Fall					
Co-op		Khoury elective 3	4		
		POLS 4701	4	Elective	4
		POLS elective 4	4	Elective	4
		POLS integrative requirement	4		
	0		16		8

Total Hours: 134

**Five Year, Three Co-ops in Summer 2/Fall**

Year 1	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Fall							
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 2500 and CS 2501	5	IS 2000	4				
CS 1200	1	ENGW 1111	4				

POLS 1150 and POLS 1151	4	POLS 1160	4				
POLS 1155 and POLS 1156	4						
	19		17		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 1210	1	Vacation		Co-op	
CS 3500	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		Khoury elective 1	4	ENGW 3302, 3308, 3311, or 3315	4	Co-op	
		POLS elective 2	4	Elective	4		
		Computing and social issues requirement	4				
		Elective	4				
		THTR 1170	1				
	0		17		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Khoury elective 2	4	Elective	4	Co-op	
		POLS elective 3	4	Elective	4		
		POLS integrative requirement	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		Khoury elective 3	4
		POLS 4701	4
		POLS elective 4	4
		Elective	4
	0		16

Total Hours: 134

**Criminal Justice and Political Science, BS**

This combined major educates students in criminal justice and political science and in the interface between the two disciplines. The scope

and sequence of political science courses provide students with a foundation in topics such as American government, comparative politics, international relations, and security and resilience. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students completing this program should be able to understand the relationships between the fields as they relate to understanding and addressing criminal behavior.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Criminal Justice Requirements**

Code	Title	Hours
<b>Criminal Justice Core Requirements</b>		
CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4
<b>Thematic Electives</b>		
Complete one of the following:		4
CRIM 1300	The Death Penalty	
CRIM 1400	Human Trafficking	
CRIM 1500	Corruption, Integrity, and Accountability	
CRIM 1700	Crime, Media, and Politics	
<b>Survey Elective</b>		
Complete one of the following:		4
CRIM 3010 to CRIM 3500		
<b>System-Wide Elective</b>		
Complete one of the following:		4
CRIM 4010	Gender, Crime, and Justice	
CRIM 4020	Race, Crime, and Justice	
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Research Methods and Electives**

Complete Option A, Option B, or Option C, below. *Note:* These options enable the student to take research methods courses (including statistics/quantitative techniques) as either CRIM courses or as POLS courses.

**OPTION A**

Code	Title	Hours
<i>Research Methods</i>		
CRIM 3600	Criminal Justice Research Methods	4
CRIM 3700	Analyzing and Using Data on Crime and Justice	4
<i>Criminal Justice Electives</i>		
Complete two courses in the following range:		8
CRIM 4001 to CRIM 4999		
<i>Political Science Electives</i>		
Complete five courses in the following range:		20
POLS 2000 to POLS 5999		

**OPTION B**

Code	Title	Hours
<i>Research Methods</i>		
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<i>Criminal Justice Electives</i>		
Complete three courses in the following range:		12
CRIM 4001 to CRIM 4999		
<i>Political Science Electives</i>		
Complete four courses in the following range:		20
POLS 2000 to POLS 5999		

**OPTION C**

Code	Title	Hours
<i>Research Methods</i>		
Complete one of the following sequences:		8
CRIM 3600 and POLS 2400	Criminal Justice Research Methods and Quantitative Techniques	
CRIM 3700 and POLS 2399	Analyzing and Using Data on Crime and Justice and Research Methods in Political Science	
<i>Criminal Justice Electives</i>		
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 2000 to POLS 5999

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record. Requirements for the concentrations are listed below (p. 789).

- American Political Institutions (p. 789)
- Campaigns and Elections (p. 789)
- Comparative Politics (p. 789)
- Identity, Culture, and Politics (p. 789)
- International Relations and Diplomacy (p. 789)
- Law and Legal Studies (p. 790)
- Public Policy (p. 790)
- Security Studies (p. 790)

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone Requirement</b>		
CRIM 4949 or POLS 4701	Senior Capstone Seminar Political Science Senior Capstone	4
<b>Due Process</b>		
CRIM 2100	Criminal Due Process	4
<b>Integrative Elective Courses</b>		
Complete two of the following:		8
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

**Political Science Concentrations (Optional)****CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

POLS 2330	American Political Thought	4
POLS 2332	Contemporary Political Thought	4

<b>Political Science Electives</b>		
Complete three POLS courses numbered 2000 and above.		12

## Mathematics and Political Science, BS

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Mathematics Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 30001 to MATH 5999		

### Political Science Requirements

Code	Title	Hours
<b>Political Science Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2399	Research Methods in Political Science	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
POLS 2325	Ancient Philosophy and Political Thought	4
POLS 2328	Modern Political Thought	4

### 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. 698)
- Comparative politics (p. 698)
- Identity, culture, and politics (p. 698)
- International relations and diplomacy (p. 699)
- Law and legal studies (p. 699)
- Public policy (p. 699)
- Security studies (p. 699)

### 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 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	

POLS 3320	Politics and Mass Media
POLS 3304	Presidential Nominating Process

POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Political Science and Business Administration, BS**

The combined major in political science and business administration offers students the opportunity to integrate the study of politics and government with an analysis of business practices and organizations. Students complete core courses in political science along with core courses in business administration that cover accounting, finance, marketing, and organizational behavior. This combined major highlights the important intersection between business practices and the evolution of politics and government.



## Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Political Science Requirements

Code	Title	Hours
<b>Introduction to College</b>		
POLS 1000	Political Science at Northeastern	1
or BUSN 1102	Personal Skill Development for Business	
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		
Complete one of the following:		4
POLS 2330	American Political Thought	
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
or MGSC 2301	Business Statistics	
<b>Political Science Electives</b>		
Complete two courses in the following range, or complete a political science concentration as outlined below:		8
POLS 2000 to POLS 5999		

## Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record.

- American Political Institutions (p. 285)
- Campaigns and Elections (p. 285)
- Comparative Politics (p. 285)
- Identity, Culture, and Politics (p. 285)
- International Relations and Diplomacy (p. 285)
- Law and Legal Studies (p. 285)
- Public Policy (p. 286)
- Security Studies (p. 286)

## Business Requirements

Code	Title	Hours
<b>Accounting</b>		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
<b>Finance</b>		
FINA 2201	Financial Management	4
<b>Marketing</b>		
MKTG 2201	Introduction to Marketing	4
<b>Organizational Behavior</b>		
ORGB 3201	Organizational Behavior	4

## Business Concentration

Complete one of the following business concentrations.

- Accounting (p. 286)
- Corporate Innovation and Venture (p. 287)
- Entrepreneurial Startups (p. 287)
- Entrepreneurship and New Venture Management (p. 288)
- Family Business (p. 289)
- Finance (p. 289)
- Fintech (p. 290)
- Healthcare Management and Consulting (p. 290)
- International Business (p. 291) (available only as a second concentration)
- Management (p. 291)
- Management Information Systems (p. 292)
- Marketing (p. 292)
- Marketing Analytics (p. 293)
- Social Innovation and Entrepreneurship (p. 293)
- Supply Chain Management (p. 294)

## Supporting Courses

Code	Title	Hours
<b>Mathematics</b>		
MATH 1231	Calculus for Business and Economics	4
or MATH 1341	Calculus 1 for Science and Engineering	
<b>Economics</b>		
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
<b>Computer Science</b>		
CS 1100	Computer Science and Its Applications	4
<b>Co-op Preparation</b>		
BUSN 1103	Professional Development for Business Co-op	1
or EESH 2000	Professional Development for Co-op	

## Integrative Requirement

Code	Title	Hours
<b>Senior Capstone</b>		
POLS 4701	Political Science Senior Capstone (or POLS 4703 Senior Thesis)	4
or STRT 4501	Strategy in Action	

**Business Cooperative Education Requirement**

Complete one six-month co-op experience.

**Political Science GPA Requirement**

Minimum 2.000 GPA required in all political science courses

**Business GPA Requirement**

Minimum 2.000 GPA required in business courses

**Program Requirement**

128 total semester hours required

**Political Science Concentrations (Optional)**

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	

POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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:		
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1000 or BUSN 1102	1	POLS 1150	4	DD NUPath	4	Open Elective	4
POLS 1155	4	POLS 1160	4	Open Elective	4	Open Elective	4
ENGW 1111	4	MGSC 2301 or POLS 2400	4				
ACCT 1201	4	ECON 1115 or 1116	4				
MATH 1231	4						
BUSN 1103 or EESH 2000	1						
	18		16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS Thought	4	Co-op		Co-op		FINA 2201	4
POLS elective	4					ACCT 2301	4
MKTG 2201	4						
CS 1100	4						

CS 1101	1						
	17		0		0		8
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op		Co-op		POLS elective	4
POLS elective	4					ND NUPath	4
ORGB 3201	4						
Concentration Class 1	4						
	16		0		0		8
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Concentration 2	4	POLS 4701 or STRT 4501	4				
ENGW 3304, 3315, or 3307	4	Concentration 4	4				
Concentration 3	4	IC NUPath	4				
EI NUPath	4	ER NUPath	4				
	16		16				

Total Hours: 131

**Political Science and Communication Studies, BS**

The combined major in political science and communication studies offers students the opportunity to integrate the study of politics and government with different forms and mediums of communication. Students complete core courses in political science along with core courses in communication studies that cover public speaking and persuasion. This combined major highlights the important role played by different forms of communication in shaping politics and government.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following: 4		
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Methodology</b>		
POLS 2399	Research Methods in Political Science	4
or COMM 2301	Communication Research Methods	
<b>Political Science Upper-Division Electives</b>		
Complete two courses in the following range: 8		
POLS 3300 to POLS 5999		
<b>Political Science Electives</b>		
Complete two courses in the following range: 8		
POLS 2000 to POLS 5999		

## Political Science Concentration (Optional)

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 185).

- American Political Institutions (p. 185)
- Campaigns and Elections (p. 185)
- Comparative Politics (p. )
- Identity, Culture, and Politics (p. 185)
- International Relations and Diplomacy (p. )
- Law and Legal Studies (p. 185)
- Public Policy (p. 185)
- Security Studies (p. )

## Communication Studies Requirements

Code	Title	Hours
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	

## Communication Studies Electives

Code	Title	Hours
<b>Foundation course</b>		
Complete one of the following: 4		
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following: 4		
COMM 1131	Sex, Relationships, and Communication	

COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing Intensive</b>		
Complete two writing intensive courses in communication studies.		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 additional Communication Studies courses. 12

## Integrative Requirements

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3320	Politics and Mass Media	4
or COMM 3320	Political Communication	

## Capstone Requirement

Complete one of the following. This course also counts toward the political science or communication studies elective requirement: 4

COMM 4102	Health Communication Campaigns	
COMM 4530	Communication and Quality of Life	
COMM 4533	Consultation Skills	
COMM 4602	Contemporary Rhetorical Theory	
COMM 4608	Strategic Communication Capstone	
COMM 4625	Online Communities	
COMM 4755	Production Capstone	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

## Political Science and Communication Studies Combined-Major Credit Requirement

Complete 84 semester hours in the major.

## Communication Studies Major Grade Requirement

No more than two grades below a C in communication studies courses may be used to satisfy degree requirements.

## Program Requirement

128 total semester hours required

## Concentrations

### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	

POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Political Science Requirements</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Theory</b>		

Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	

**Political Science Electives**

Complete four courses from the following range, or complete a concentration as outlined below:	16
POLS 2000 to POLS 5999	

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your advisor so that it may be added to your record. Requirements for the concentrations are listed below (p. 849).

- American Political Institutions (p. 848)
- Campaigns and Elections (p. 849)
- Comparative Politics (p. 849)
- Identity, Culture, and Politics (p. 849)
- International Relations and Diplomacy (p. 849)
- Law and Legal Studies (p. 849)
- Public Policy (p. 849)
- Security Studies (p. 849)

**Economics Requirements for BS**

Code	Title	Hours
<b>Breadth Courses</b>		
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
or MISM 2510	Fundamentals of Information Analytics	
MATH 1231	Calculus for Business and Economics	4

**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 2560	Applied Econometrics	4

**Economics Electives**

Complete 3 Economics elective courses found in the following ranges, with no more than 1 in the ECON 1200 to ECON 1999 range:	12
ECON 1200 to ECON 1999	
ECON 3000 to ECON 4689	
ECON 4900 to ECON 4999	
ECON 5200 to ECON 5999	

**Supporting Courses**

Complete either of the statistics and departmental elective combinations listed below:

**COMBINATION A**

Code	Title	Hours
<b>Statistics</b>		
POLS 2400	Quantitative Techniques	4
<b>Economics</b>		

Complete one course from the following ranges. This course may not also be used as an Economics elective:	4
ECON 1200 to ECON 1999	
ECON 3000 to ECON 4689	
ECON 4900 to ECON 4999	
ECON 5200 to ECON 5999	

**COMBINATION B**

Code	Title	Hours
<b>Statistics</b>		
ECON 2350	Statistics	4
<b>Political Science</b>		
Complete one course in the following range:	4	
POLS 2401 to POLS 5999		

**Integrative Requirements**

Code	Title	Hours
<b>Senior Seminar/Capstone</b>		
Complete one of the following:	4	
ECON 4692	Senior Economics Seminar	
POLS 4701	Political Science Senior Capstone	
POLS 4703	Senior Thesis	

**Combined Major GPA/Credit Requirement:**

Grades in the following required Economics courses and in Quantitative Techniques (POLS 2400) or Statistics (ECON 2350) must average to a minimum of C (2.000):

Code	Title	Hours
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2350	Statistics	4
or POLS 2400	Quantitative Techniques	
ECON 2560	Applied Econometrics	4

**Program Requirement**

128 total semester hours required.

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:	16	
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		



If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:	8
POLS 2345 Urban Policies and Politics	
POLS 2350 State and Local Politics	
POLS 2355 Intergovernmental Relations	
POLS 3310 Public Opinion, Voting, and Elections	
POLS 3162 Local Campaigns and Elections	
POLS 3320 Politics and Mass Media	
POLS 3304 Presidential Nominating Process	

### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370 Religion and Politics		
POLS 3418 Nationalism		
POLS 3430 Revolution, Civil War, and Insurrection		
POLS 3487 Politics of Developing Nations		
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435 Politics and Governance of Europe and the European Union		
POLS 3465 Government and Politics in the Middle East		
POLS 3470 Arab-Israeli Conflict		
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915 Model Arab League		
POLS 4918 Model NATO		
POLS 4937 Dialogue of Civilizations: Government and Politics Abroad		

### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418 Nationalism		4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360 Politics of Poverty		
POLS 2368 Music and Politics in America and Abroad		
POLS 2370 Religion and Politics		
POLS 2375 Gender and Politics		
POLS 3309 Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy		
POLS 3324 Law and Society		

### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910 Model United Nations		
POLS 4915 Model Arab League		

POLS 4938 Dialogue of Civilizations: International Politics Abroad

<b>Core Courses</b>		Hours
Complete three of the following:		12
POLS 3405 International Political Economy		
POLS 3406 International Law		
POLS 3408 International Security		
POLS 3435 Politics and Governance of Europe and the European Union		
POLS 3470 Arab-Israeli Conflict		

### CONCENTRATION IN LAW AND LEGAL STUDIES

Code	Title	Hours
Complete four of the following:		16
POLS 2330 American Political Thought		
POLS 3300 The U.S. Congress		
POLS 3302 Judicial Process and Behavior		
POLS 3324 Law and Society		
POLS 3406 International Law		
POLS 3409 Global Governance		
POLS 4500 U.S. Constitutional Law		
POLS 4505 U.S. Civil Liberties		

### CONCENTRATION IN PUBLIC POLICY

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307 Public Policy and Administration		4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430 Revolution, Civil War, and Insurrection		
POLS 3470 Arab-Israeli Conflict		
POLS 3487 Politics of Developing Nations		

## Plan of Study

### Four Years, Two Co-ops in Summer 2/Fall

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ENGW 1111	4	MATH 1231	4	Elective	4	Elective	4
POLS 1155	4	POLS 1150	4	Elective	4	Elective	4
ECON 1115	4	CS 1100	4				
Elective	4	ECON 1116	4				
		16	16		8		8
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1160	4	POLS 2400 or ECON 2350	4	Elective	4	Co-op	0
POLS undergraduat elective	4	POLS undergraduat elective	4	Political Theory Course	4		
ECON 2315	4	ECON 2316	4				
ECON elective 1	4	ECON elective 2	4				
		16	16		8		0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	0
		POLS undergraduat elective	4	ECON elective or POLS elective <sup>See</sup> Supporting Courses, Combinations A and B.	4		
		ECON elective 3	4				
		ECON 2560	4				
		0	16		8		0
Year 4							
Fall	Hours	Spring	Hours				
Co-op		POLS 4701, 4703, or ECON 4692	4				
		Elective	4				
		Elective	4				
		Elective	4				
		0	16				

Total Hours: 128

### Political Science and Human Services, BS

The combined degree seeks to prepare students with skills and tools to advocate for social issues at all levels of society. Human services program students are well positioned to pursue fields in the social change arena (nongovernment organizations, or NGOs; counseling; and political advocacy). Political science students are also well positioned to change and shape the domestic and international political landscape in American politics, comparative politics, international relations, and public policy. Students engage in an integrated educational program that

emphasizes experiential approaches to learning through service-learning, co-op, internship, and study-abroad opportunities. Upon completion of the degree, students can apply professional skills in counseling roles, nonprofit management, political advocacy, or organizational and community development. Successful students are poised to pursue law school, graduate school, careers in government and the nonprofit sector, as well as in teaching, journalism, legislative or lobbying positions, public relations activities, and work in international corporations and NGOs.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete three courses in the following range:		12
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 943)
- Campaigns and Elections (p. 943)
- Comparative Politics (p. 943)
- Identity, Culture, and Politics (p. 943)
- International Relations and Diplomacy (p. 943)
- Law and Legal Studies (p. 943)
- Public Policy (p. 944)
- Security Studies (p. 944)

**Supporting Course for Political Science**

Code	Title	Hours
<b>Mathematics</b>		
Complete one of the following to fulfill the prerequisite for POLS 2400:		4
MATH 1213	Interactive Mathematics	
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	

**Human Services Requirements**

Code	Title	Hours
<b>Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 4994	Human Services Internship	6

**Human Services and Diverse Populations**

Complete one of the following:		4
HUSV 2355	Race, Identity, Social Change, and Empowerment	
HUSV 2800	Sexual Orientation and Gender Expression	
HUSV 2960	Intercultural Studies through Human Services	

**Human Services Electives**

Complete three HUSV courses.	12
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**Integrative Requirements**

Code	Title	Hours
<b>Integrative Courses</b>		
POLS 3307	Public Policy and Administration	4
HUSV 3900	Social Policy	4
<b>Research Methods</b>		
Complete one of the following:		4
POLS 2399	Research Methods in Political Science	
HUSV 2970	Research Methods for Human Services	

**Capstone and Elective**

Complete one of the following options:	8
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*Option A*

Complete POLS 4701 or POLS 4703 and complete one additional human services course that has not been used in previous requirements:

POLS 4701	Political Science Senior Capstone
or POLS 4703	Senior Thesis
HUSV 1100 to HUSV 5999	

*Option B*

Complete HUSV 4700 and complete one additional political science course numbered 2000 or higher that has not been used in previous requirements:

HUSV 4700	Senior Seminar in Human Services
POLS 2000 to POLS 5999	

**Political Science and Human Services Combined Major Credit Requirement**

Complete 86 semester hours in the major.

**Program Requirement**

128 total semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4

**Campaigns and Elections Electives**

If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.

Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	

**Regional Requirements**

Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	

**Experiential/Practicum Requirement**

Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	

POLS 4937	Dialogue of Civilizations: Government and Politics Abroad
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**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
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**Core Course**

POLS 3418	Nationalism	4
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**Electives**

Complete three of the following: 12

POLS 2360	Politics of Poverty
POLS 2368	Music and Politics in America and Abroad
POLS 2370	Religion and Politics
POLS 2375	Gender and Politics
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy
POLS 3324	Law and Society

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
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**Experiential/Practicum Requirement**

Complete one of the following: 4

POLS 4910	Model United Nations
POLS 4915	Model Arab League
POLS 4938	Dialogue of Civilizations: International Politics Abroad

**Core Courses**

Complete three of the following: 12

POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3408	International Security
POLS 3435	Politics and Governance of Europe and the European Union
POLS 3470	Arab-Israeli Conflict

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
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Complete four of the following: 16

POLS 2330	American Political Thought
POLS 3300	The U.S. Congress
POLS 3302	Judicial Process and Behavior
POLS 3324	Law and Society
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4500	U.S. Constitutional Law
POLS 4505	U.S. Civil Liberties

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
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**Core Requirement**

POLS 3307	Public Policy and Administration	4
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**Electives**

Complete three of the following: 12

POLS 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
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Complete four of the following: 16

POLS 3408	International Security
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3425	U.S. Foreign Policy
POLS 3430	Revolution, Civil War, and Insurrection
POLS 3470	Arab-Israeli Conflict
POLS 3487	Politics of Developing Nations

**Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours
HUSV 1000 or POLS 1000	1	POLS 1150	4
POLS 1155	4	POLS 1160	4
ENGW 1111	4	HUSV 2300	4
HUSV 1101	4	HUSV elective	4
Elective	4		
17		16	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
EESH 2000	1	Co-op		Co-op		POLS 2400 supporting course	4
POLS thought	4					HUSV elective	4
HUSV diverse population course	4						
HUSV 3570	4						
Research methods course	4						
17		0		0		8	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS elective	4	Co-op		Co-op		POLS elective	4
POLS 2400	4					HUSV elective	4
POLS 3307	4						

HUSV 3900	4			
	16	0	0	8
<b>Year 4</b>				
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	
POLS elective	4	Elective	4	
Capstone and elective	8	Elective	4	
HUSV 4700 and one POLS course (Option A) or POLS 4701 (or POLS 4703) and one HUSV course (Option B)		Elective	4	
Elective	4	Elective	4	
	16		16	
<b>Year 5</b>				
<b>Fall</b>	<b>Hours</b>			
HUSV 4994	6			
Elective	4			
Elective	4			
	14			
Total Hours: 128				

## Political Science and Philosophy, BS

The combined major in political science and philosophy enables students to develop an integrated understanding of politics, political theory, ethical theory, and theories of justice. Students who complete the major will have the training to critically evaluate and assess public policies and social issues on both political and ethical grounds, including issues such as tax policy, immigration, environmental protection, trade policy, healthcare, education, defense policy, and much more.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Political Science Requirements

Code	Title	Hours
<b>Core Courses in Political Science</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
POLS 2400	Quantitative Techniques	4
POLS 2399	Research Methods in Political Science	4
<b>Political Thought</b>		
Complete two of the following:		8
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete four courses in the following range:		16
POLS 2000 to POLS 5999		

### Political Science Concentrations (Optional)

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1058)
- Campaigns and Elections (p. 1058)
- Comparative Politics (p. 1058)
- Identity, Culture, and Politics (p. 1058)
- International Relations and Diplomacy (p. 1058)
- Law and Legal Studies (p. 1058)
- Public Policy (p. 1058)
- Security Studies (p. 1059)

### Philosophy Requirements

Code	Title	Hours
<b>Philosophy Required Courses</b>		
PHIL 1115	Introduction to Logic	4
PHIL 2303	Social and Political Philosophy	4
PHIL 2325	Ancient Philosophy and Political Thought	4
or POLS 2325	Ancient Philosophy and Political Thought	
PHIL 2330	Modern Philosophy	4
<b>Philosophy Restricted Electives</b>		
Complete two courses from the following with one course at the 4000 or 5000 level:		8
PHIL 3100	The Religious Worlds of Boston: Faith and Devotion in Urban Life	
PHIL 3343	Existentialism	
PHIL 3360	Scientific Approaches to Philosophy	
PHIL 3435	Moral Philosophy	
PHIL 3460	Philosophy and Literature	
PHIL 4500	Theory of Knowledge	

PHIL 4510	Philosophy of Science
PHIL 4515	Advanced Logic
PHIL 4535	Philosophy of Mind
PHIL 4550	Philosophy of Economics
PHIL 4555	Philosophy of Biology
PHIL 4606	Seminar: Theories and Methods in Religious Studies
PHIL 4903	Seminar in Religion
PHIL 5001	Global Justice
PHIL 5002	Ethics and Public Policy
PHIL 5005	Information Ethics
PHIL 5010	AI Ethics

**Additional Electives**

Complete three additional electives in philosophy or religion. 12

**Integrative Requirement**

Code	Title	Hours
Complete one of the following:		
PHIL 5001	Global Justice	4
or PHIL 5002	Ethics and Public Policy	

**Program Requirement**

128 semester hours required

**CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS**

Code	Title	Hours
Complete four of the following: 16		
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

**CONCENTRATION IN CAMPAIGNS AND ELECTIONS**

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following: 8		
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

**CONCENTRATION IN COMPARATIVE POLITICS**

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

**CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS**

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

**CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY**

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	



**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**Plan of Study**

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
POLS 1000	1	POLS 1150	4	PHIL 2325 or POLS 2325	4
POLS 1155	4	MATH 1215	4	PHIL Restricted Elective	4
ENGW 1111	4	POLS 1160	4		
PHIL 1115	4	Elective	4		
POLS elective	4				
		17			8

Year 2			
Fall	Hours	Spring	Hours
POLS Thought	4	Co-op	Co-op
POLS 2399	4		
PHIL 2330	4		
Elective	4		
		16	0

Year 3						
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2
POLS elective	4	Co-op	Co-op	POLS elective	4	
PHIL 5001	4			PHIL Restricted Elective	4	
POLS 2400	4					
POLS elective	4					
		16	0	0	0	8

Year 4			
Fall	Hours	Spring	Hours
POLS elective	4	Co-op	Co-op
POLS elective	4		
POLS Thought course	4		
PHIL Elective	4		
		16	0

Year 5		
Fall	Hours	Spring
PHIL Elective	4	Elective
PHIL Elective	4	Elective
POLS Elective	4	Elective
Elective	4	Elective
		16

Total Hours: 129

**Political Science, Minor**

The political science minor introduces students to key concepts, practices, and perspectives in the study of politics and government. Students complete at least two of the three introductory courses—American government, comparative politics, and international relations—as well as three other courses in political science.

**Minor Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

### Required Courses

Code	Title	Hours
Complete two of the following:		
POLS 1150	American Government	8
POLS 1155	Comparative Politics	
POLS 1160	International Relations	

### Elective Courses

Code	Title	Hours
Complete three political science courses.		
		12

### GPA Requirement

2.000 GPA required in the minor

### American Political Institutions, Minor

The American political institutions minor introduces students to key concepts, practices, and perspectives in the study of American politics and government. Students complete the introductory American government course as well as four other courses that focus on various aspects of American politics and government at the national, state, and local levels.

### Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

*Note:* This minor is restricted to students who are not enrolled in the political science major or in any political science combined major.

### Required Course

Code	Title	Hours
POLS 1150	American Government	4

### Electives

Code	Title	Hours
Complete four of the following:		
POLS 2334	Bureaucracy and Government 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 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	8
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3420	U.S. National Security Policy	
POLS 3425	U.S. Foreign Policy	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	
POLS 4910	Model United Nations	

### GPA Requirement

2.000 GPA required in the minor

### Sociology and Anthropology

Website (<http://www.northeastern.edu/socant/>)

#### Liza Weinstein, PhD

Associate Professor of Sociology and Chair  
l.weinstein@northeastern.edu

#### Department Information

900 Renaissance Park  
617.373.2686  
617.373.2688 (fax)

Sociology and cultural anthropology provide the critical perspective needed for studying the social and cultural arrangements in which people live, for understanding how societies function, for investigating the conditions under which people change their institutions, and for describing the modes and conditions of cooperation that make social life possible.

Courses in the program examine such areas as urbanization, the environment, health, globalization and human rights, gender and sexuality, social movements, the cultural underpinnings of science and technology, new media, and the comparative analysis of advanced capitalist societies. Many courses are directly relevant to majors in

other fields, including economics, political science, philosophy, literature, criminal justice, and business.

The major in sociology or cultural anthropology seeks to prepare students for careers in public or private service, including such fields as law, teaching, social work, administration or management, and research.

### Academic Progression Standards

Same as university-wide standards described under “Academic Status (p. 27).”

### 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 (<https://registrar.northeastern.edu/article/combined-majors/>), 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. 30).” For template program requirements, visit the myNortheastern web portal (<https://my.northeastern.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 adviser by the end of the sophomore year.

## Programs

### Bachelor of Arts (BA)

- Sociology (p. 1130)
- Cultural Anthropology (p. 1132)
- Sociology and Cultural Anthropology (p. 1134)
- Communication Studies and Sociology (p. 141)
- Cultural Anthropology and Theatre (p. 244)
- English and Cultural Anthropology (p. 866)
- History and Cultural Anthropology (p. 901)
- Human Services and Sociology (p. 934)
- International Affairs and Cultural Anthropology (p. 974)
- Media and Screen Studies and Sociology (p. 166)
- Sociology and Environmental Studies (p. 651)
- Sociology and International Affairs (p. 995)
- Sociology and Political Science (p. 1100)

### Bachelor of Science (BS)

- Sociology (p. 1155)
- Cultural Anthropology (p. 1157)
- Computer Science and Sociology (p. 375)
- Criminal Justice and Sociology (p. 791)
- Health Science and Sociology (p. 508)
- Human Services and Sociology (p. 944)
- Linguistics and Cultural Anthropology (p. 624)
- Mathematics and Cultural Anthropology (p. 695)

- Mathematics and Sociology (p. 700)
- Sociology and Cultural Anthropology (p. 1171)

## Minors

- Cultural Anthropology (p. 1171)
- Science and Technology Studies (p. 1172)
- Sociology (p. 1172)

## Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (p. )

## Sociology, BA

Sociology is the scientific study of society. It begins with the premise that individuals are 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. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## Sociology Major Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
<b>Cultural Anthropology</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Advanced Methods Requirement</b>		
Complete one of the following:		4
ANTH 3410	Ethnographic Field Experience	
DS 3000	Foundations of Data Science	
DA 5030	Introduction to Data Mining/Machine Learning	
DS 4400	Machine Learning and Data Mining 1	

HINF 5301	Personal Health Technologies: Field Deployment and System Evaluation	
POLS 2400	Quantitative Techniques	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Senior Seminar</b>		
SOCL 4600	Senior Seminar	4

**Required Sociology Electives**

Code	Title	Hours
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**Introductory-Level Electives**

Complete one course in the following range:	4
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 Twenty-First-Century Workplace
SOCL 2268	Social Movements
SOCL 3450	Class, Power, and Social Change

**Elective in Social Inequality**

Complete one of the following:	4
SOCL 1245	Sociology of Poverty
SOCL 1275	Social Stratification
SOCL 2270	Race and Ethnic Relations

**Advanced-Level Elective**

Complete one course in the following range:	4
SOCL 4000 to SOCL 4999	

**Social Science Electives**

Complete three social science courses in the following subject areas: AFRS, AFAM, ANTH, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, or PSYC.	12
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**Sociology Experiential Learning Requirement**

Code	Title	Hours
Complete one of the following courses or a study abroad or a co-op:		4
SOCL 3487	Applied Sociology: Practice and Theory	
SOCL 4971	Junior/Senior Honors Project 2	

**Sociology Major Grade Requirement**

A GPA of 2.000 across all major courses is required.

**Sociology Major Credit Requirement**

Complete 68 semester hours in the major.

**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
SOCL 1000	1	SOCL 1200-level elective	4	Vacation	0
				Vacation	0

SOCL 1101	4	SOCL 1200-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 3300	4	Foreign language core course	4	Vacation	0	Co-op	0
SOCL 2320	4	SOCL 2321	4				
Elective	4	SOCL 1200-level elective	4				
Social science elective	4	EESH 2000	1				
		Elective	4				
	16		17	0		0	0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Elective	4	Co-op	0
		Foreign language core course	4	SOCL intermediate elective	4		
		Elective	4				
		SOCL intermediate elective	4				
	0		16	8		0	0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Foreign language core course	4	Elective	4	Co-op	0
		Elective	4	Social science elective	4		
		SOCL intermediate elective	4				
		Social science elective	4				
	0		16	8		0	0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	SOCL 4600	4
		SOCL 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 1200-level elective	4	Vacation	0	Vacation	0
SOCL 1101	4	SOCL 1200-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 3300	4	Co-op	0	Co-op	0	Elective	4
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 language core course	4	Co-op	0	Co-op	0	Elective	4
ENGW 3315	4					SOCL intermediate elective	4
SOCL 1200-Level elective	4						
SOCL 2321	4						
	16		0		0		8

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Social science elective	4	Co-op	0	Co-op	0	Vacation	0
Foreign language core course	4						
SOCL intermediate elective	4						
Elective	4						
	16		0		0		0

Year 5			
Fall	Hours	Spring	Hours
SOCL intermediate elective	4	Social science elective	4
Social science elective	4	Elective	4
Elective	4	SOCL advanced elective	4
Elective	4	SOCL 4600	4
	16		16

Total Hours: 130

## Cultural Anthropology, BA

Anthropology is the holistic, cross-cultural study of humanity that explores the multiple ways humans live and create meaning in the world. At Northeastern University, the sociology and anthropology department specializes in **cultural anthropology** and **social anthropology**—the relationship of culture to the institutions, relationships, and practices of everyday life that make up social structures.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Cultural Anthropology Major Requirements

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 4600	Senior Seminar	4
SOCL 1101	Introduction to Sociology	4

### Advanced Area Courses

Additional courses taken in this section may be used as electives.

Complete two of the following:	8
ANTH 4350	Ethnography of Southeast Asia
ANTH 4500	Latin American Society and Development

ANTH 4505	Native North Americans
ANTH 4510	Anthropology of Africa
ANTH 4515	Culture and Politics in Modern India

**Anthropology Electives**  
 Complete six ANTH courses. Two study- abroad courses may count toward this requirement with prior permission from the department. 24

**Social Science Electives**  
 Complete three social science courses from the following subject areas. Social science electives may not include music or art: AFRS, AFAM, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, PSYC, or SOCL. 12

<sup>1</sup> Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

**Cultural Anthropology Major Grade Requirement**

A GPA of 2.000 across all major courses is required.

**Cultural Anthropology Major Credit Requirement**

Complete 68 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 1000	1	SOCL 1101	4	Vacation	0	Vacation	0
ANTH 1101	4	Anthropology elective	4				
Social science elective	4	ENGW 1111	4				
Elective	4	MATH 1215	4				
Elective	4						
		17			16		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2300	4	Social science elective	4	Vacation	0	Co-op	0
Foreign language core course	4	Foreign language core course	4				
Social science elective	4	Elective	4				
Elective	4	Anthropology elective	4				
		EESH 2000	1				
		16			17		

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Advanced area ANTH 4500-ANTH 4515	4	ANTH 2305	4	Co-op	0
		Anthropology elective	4	Elective	4		
		ENGW 3315	4				
		Foreign language core course	4				
		0			16		

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Advanced area ANTH 4500-ANTH 4515	4	Elective	4	Co-op	0
		Anthropology elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0			16		

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	ANTH 4600	4
		Elective	4
		Anthropology elective	4
		Elective	4
		0	16

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1**

**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		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2300	4	Co-op	0	Co-op	0	Foreign language core course	4
Foreign language core course	4					Elective	4
Social science elective	4						



Anthropology elective	4						
EESH 2000	1						
	17		0		0		8
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
ANTH 2305	4	Co-op	0	Co-op	0	Elective	4
Foreign language core course	4					Elective	4
ENGW 3315	4						
Anthropology elective	4						
	16		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
Advanced area ANTH 4500-ANTH 4515	4	Co-op	0	Co-op	0	Vacation	0
Anthropology elective	4						
Social science elective	4						
Elective	4						
	16		0		0		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Advanced area ANTH 4500-ANTH 4515	4	ANTH 4600	4				
Anthropology elective	4	Elective	4				
Elective	4	Elective	4				
Anthropology 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Sociology Major Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Sociology Electives</b>		
<i>Introductory Electives</i>		
Complete two courses in the following range:		8
SOCL 1110 to SOCL 1999		
<i>Intermediate Elective</i>		
Complete one course in the following range:		4
SOCL 2000 to SOCL 3999		
<i>Advanced Elective</i>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 4999		
<b>Experiential Learning</b>		
Complete one of the following courses, or complete a study abroad or a dialogue of civilizations:		4
SOCL 3487	Applied Sociology: Practice and Theory	
COOP 3945	Co-op Work Experience	
SOCL 4971	Junior/Senior Honors Project 2	

### Anthropology Major Requirements

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Advanced Area Courses</b>		
Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Anthropology Electives**

Complete four ANTH courses. One study-abroad course may also count toward this requirement with prior permission from the department. 16

**Integrative Requirement**

Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600) or Senior Seminar (SOCL 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

Code	Title	Hours
<b>Required Course</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
SOCL 4600	Senior Seminar	4
or ANTH 4600	Senior Seminar	

**Sociology and Cultural Anthropology Major Grade Requirement**

A GPA of 2.000 across all major courses is required.

**Sociology and Cultural Anthropology Combined-Major Credit Requirement**

Complete 76 semester hours in the major.

**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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUpath requirements Societies and Institutions (SI) and Ethical Reasoning (ER) are met through the major course requirements.

NUpath requirements Natural and Designed World (ND), Creative Expression/Innovation (EI), Interpreting Culture (IC), Formal and Quantitative Reasoning (FQ), Difference and Diversity (DD), and Analyzing and Using Data (AD) may be met through electives in the major.

**Communication Studies Requirements**

Code	Title	Hours
<b>Communication Studies Common Requirements</b>		
COMM 1000	Communication Studies at Northeastern	1
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4
or COMM 2301	Communication Research Methods	
<b>Foundation Course</b>		
Complete one of the following:		4
COMM 1210	Persuasion and Rhetoric	
COMM 1225	Communication Theory	
COMM 1231	Principles of Organizational Communication	
COMM 1255	Communication in a Digital Age	
<b>Cluster Course</b>		
Complete one of the following:		4
COMM 1131	Sex, Relationships, and Communication	
COMM 2303	Global and Intercultural Communication	
COMM 2304	Communication and Gender	
COMM 2501	Communication Law	
COMM 2551	Free Speech in Cyberspace	
<b>Writing-Intensive Courses</b>		
Complete two of the following:		8
COMM 3200	Mobile Communication	
COMM 3201	Health Communication	
COMM 3230	Interpersonal Communication	
COMM 3304	Communication and Inclusion	
COMM 3320	Political Communication	
COMM 3414	Great Speakers and Speeches	
COMM 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 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 COMM courses. 12

**Sociology Requirements**

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4

SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4

**Introductory Electives**

Complete two of the following: 8

SOCL 1120	Society and Health
SOCL 1228	Social Problems
SOCL 1241	Violence and Society
SOCL 1245	Sociology of Poverty
SOCL 1255	Sociology of the Family
SOCL 1260	Gender in a Changing Society
SOCL 1275	Social Stratification
SOCL 1290	Juvenile Delinquency
SOCL 1295	Drugs and Society

**Intermediate-Level Elective**

Complete one of the following: 4

SOCL 2268	Social Movements
SOCL 2270	Race and Ethnic Relations
SOCL 2358	Current Issues in Cities and Suburbs
SOCL 3440	Sociology of Human Service Organizations
SOCL 3450	Class, Power, and Social Change
SOCL 3408	Sociology of Organizations
SOCL 3465	Globalization and the Evolution of Human Societies
SOCL 3485	Environment, Technology, and Society
SOCL 3487	Applied Sociology: Practice and Theory

**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 4528	Computers and Society
SOCL 4580	Special Topics in Sociology
SOCL 4992	Directed Study

**Capstone and Integrative Requirements**

Code	Title	Hours
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**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 Four Years, Two Co-ops**

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
COMM 1000	1	ENGW 1111	4	Communication Studies cluster course	4	Introductory Sociology elective	4	
COMM 1101	4	Communicati Studies foundation course	4	Elective	4	Elective	4	
COMM 1112 or 2301	4	SOCL 2320	4					
SOCL 1101	4	SOCL 2321	4					
SOCL 3300	4							
		17			16			8

Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Communication Studies elective	4	CO-OP	4	CO-OP	0	Communication Studies elective	4	
Elective	4					Communicati Studies writing-intensive	4	
Introductory Sociology elective	4							
Elective	4							
EEAM 2000	1							
		17			0			0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication Studies writing-intensive	4	CO-OP	4	CO-OP	0	Communication Studies elective	4

Intermediate Sociology elective	4		Elective	4
Advanced Writing in the Discipline	4			
Elective	4			
	16	0	0	8

**Year 4**

Fall	Hours	Spring	Hours
Elective	4	Communication Studies or Sociology capstone	4
Elective	4	Communication Studies or Sociology capstone elective	4
Integrative course	4	Elective	4
Advanced Sociology elective	4	Elective	4
	16		16

Total Hours: 130

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4

### Advanced Area Courses

Complete two of the following:

ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

### Anthropology Electives

Complete three courses in the following range. Two study-abroad courses may count toward this requirement with prior permission from the department:

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
<b>Foundational Stages</b>		
THTR 1101	Introduction to Theatre	4
THTR 1120	Acting 1	4
THTR 1131	Technical Theatre 1	4
THTR 1270	Introduction to Theatrical Design	4
THTR 2325	From Script to Stage	4

### Theatre Texts and Context

Complete one of the following:

THTR 2300	Classics of Global Theatre	
THTR 2315	Rebels of Modern Drama	
THTR 2320	Classics of 20th-Century American Drama	
THTR 2340	Theatre and Society	

### Making Theatre

THTR 1100	Production Experience 1	1
THTR 2000	Production Experience 2	1
THTR 4702	Capstone Rehearsal and Performance	4

### Intermediate or Advanced Technique

Complete two of the following:

THTR 2310	History of Musical Theatre	
THTR 2330	Playwriting	
THTR 2342	Acting 2	
THTR 2345	Acting for the Camera	
THTR 2346	Viewpoints	
THTR 2370	Lighting Design	

THTR 2380	Costume Design
THTR 2400	Scenic Design
THTR 2500	Breaking the Glass Ceiling: Women in Theatre
THTR 3450	Acting 3—Playing Shakespeare
THTR 3550	Directing for the Stage
THTR 3570	Musical Theatre Performance 2
THTR 3100	Creative Storytelling for Social Engagement
THTR 3200	Queer Theatre and Performance
THTR 3400	Designing Combat for the Stage

## Integrative Requirements

Code	Title	Hours
Note: THTR 4702 is permitted to also count as an integrative course.		
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. 46).

## BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

## NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

## Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

## English Requirements

Code	Title	Hours
<b>English Course-Level Requirement</b>		
In addition to the capstone, two of the courses chosen from the lists below must be numbered 3000–4999.		
<b>Introduction to College</b>		
ENGL 1000	English at Northeastern	1
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Writing Studies	
<b>Diversity</b>		
Complete one of the following courses. This course may also be used to fulfill an additional English requirement below:		4
ENGL 2150	Literature and Digital Diversity	
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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	
<b>Pre-Nineteenth-Century Literature</b>		
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/JWSS 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 4000	Topics in Early Literatures	
ENGL 4020	Topics in 17th- and 18th-Century Literatures	
<b>Nineteenth-, Twentieth-, and Twenty-First-Century Literature</b>		
Complete one of the following:		4
ENGL 2330	The American Renaissance	
ENGL 3720	19th-Century Major Figure	
ENGL 4040	Topics in 19th-Century Literatures	
ENGL 2301	The Graphic Novel	
ENGL 2440	The Modern Bestseller	
ENGL 2600	Irish Literary Culture (Abroad)	
ENGL 2610	Contemporary Israeli Literature and Art (Abroad)	
ENGL/JWSS 3685	Modern and Contemporary Jewish Literature	
ENGL 3730	20th- and 21st-Century Major Figure	
<b>Theories and Methods</b>		

Complete one of the following:		4
ENGL 1140	Grammar: The Architecture of English	
ENGL 1160	Introduction to Rhetoric	
ENGL 1410	Introduction to 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 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 1450	Reading and Writing in the Digital Age	
ENGL 1502	American Literature to 1865	
ENGL 1503	American Literature 1865 to Present	
ENGL 2150	Literature and Digital Diversity	
ENGL 2380	The Modern Novel	
ENGL 2420	Contemporary Poetry	
ENGL 2430	Contemporary Fiction	
ENGL 2450	Postcolonial Literature	
ENGL 2451	Postcolonial Women Writers	
ENGL 2455	American Women Writers Race	
ENGL 2460	Multiethnic Literatures of the U.S.	
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 3487	Film and Text (Abroad)	
ENGL 3582	Children's Literature	
ENGL 3663	The African-American Novel	
ENGL 3676	Representing Gender and Sexuality in Literature	

**Writing**

Complete one of the following:		4
ENGL 2700	Creative Writing	
ENGL 2710	Style and Editing	
ENGL 2740	Writing and Community Engagement	
ENGL 2760	Writing in Global Contexts	
ENGL 2770	Writing to Heal	
ENGL 2780	Visual Writing: Writing Visuals	
ENGL 2850	Writing for Social Media: Theory and Practice	

ENGL 3375	Writing Boston	
ENGL 3376	Creative Nonfiction	
ENGL 3377	Poetry Workshop	
ENGL 3378	Fiction Workshop	
ENGL 3380	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

**Cultural Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4

**Area Courses**

Additional 'area courses' taken may count as anthropology electives.

Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Capstone**

Students are expected to complete the following course in spring of their senior year:

ANTH 4600	Senior Seminar	4
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**Anthropology Electives**

Complete three 4-semester-hour courses in addition to the above requirements. One study-abroad course may also count toward this requirement with prior permission from the department. 12

**Integrative Requirements**

**Code Title Hours**  
 One integrative course is required for each discipline. Courses taken as electives above may not be used as integrative courses.

**English Integrative Course**

ENGL 2450	Postcolonial Literature	4
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**Cultural Anthropology Integrative Courses**

Complete one of the following: 4

ANTH 2300	Reading Culture through Ethnography	
ANTH 3421	Foundations of Anthropological Theory	

**Cultural Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.



## English and Cultural Anthropology Combined-Major Credit Requirement

Complete 88 semester hours in the major.

### Program Requirement

128 total semester hours required

### 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### History Requirements

Code	Title	Hours
<b>History Colloquium</b>		
HIST 1000	History at Northeastern	1
HIST 1200	Historical Research and Writing	1
HIST 1201	First-Year Seminar	4
<b>Introductory Level</b>		
Complete one history course from the 1000 level.		4
<b>History Seminar and Historical Writing</b>		
HIST 2301	The History Seminar	4
HIST 2302	Historical Writing	1
<b>Pre-1800 History Elective</b>		
Complete one course from the following:		4
HIST 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. 4

### Cultural Anthropology Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
<b>Area Courses</b>		
Complete two courses from the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
<b>Anthropology Electives</b>		
Complete three courses in the following range. One study-abroad course may count toward this requirement.		12
ANTH 2001 to ANTH 4599		

### Capstone Requirements

Code	Title	Hours
Complete one of the following:		4
ANTH 4600	Senior Seminar	
HIST 4701	Capstone Seminar	

### Integrative Requirements

ANTH courses below will double count as area courses.

Code	Title	Hours
ANTH 4350	Ethnography of Southeast Asia	4
ANTH 4510	Anthropology of Africa	4
HIST 2360	History of Capitalism in East Asia	4

Students taking Senior Seminar (ANTH 4600) must complete either a one-semester senior project, which they would do in the context of ANTH 4600, or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

### Anthropology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Sample Five Years, Three Co-ops in Summer 2/Fall

Year 1						
Fall	Hours	Spring	Hours	Summer 1	Hours Summer 2	Hours
HIST 1000	1	HIST elective or integrative 1	4	Vacation	Vacation	

HIST 1200	1 HIST elective or integrative 2	4				
HIST 1201	4 ANTH 2305	4				
ENGW 1111	4 Elective	4				
ANTH 1101	4					
Elective	4					
	18	16	0	0		

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HIST 2301	4	HIST elective or integrative 3	4	Vacation		Co-op	
HIST 2302	1	HIST elective or integrative 4	4				
ANTH 3410	4	ANTH 3421	4				
ANTH area course 1	4	Elective	4				
Elective	4						
	17	16	0	0			

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 5	4	Elective	4	Co-op	
		ANTH area course 2	4	Elective	4		
		ANTH elective 1	4				
		Elective	4				
	0	16	8	0			

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		HIST elective or integrative 6	4	Elective	4	Co-op	
		ANTH elective 2	4	Elective	4		
		ANTH elective 3	4				
		Elective	4				
	0	16	8	0			

**Year 5**

Fall	Hours	Spring	Hours
Co-op		HIST capstone or HIST senior project or ANTH capstone	4
		HIST elective or integrative 7	4
		Elective	4

Elective	4
0	16

Total Hours: 131

## Human Services and Sociology, BA

Students pursuing a combined degree in human services and sociology will integrate the theoretical understandings of these two fields to better understand organizational and group behavior and their implications for individuals and communities utilizing human services. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. The sociology major prepares students to rigorously analyze the social, political, and economic spheres of society at the local and global levels. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. The combined major provides students with the conceptual and practical tools to understand how various features of society affect its members as well as how people create social change.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Human Services Requirements

Code	Title	Hours
<b>Required Human Services Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Research Methods</b>		
Complete option A or option B:		4-8
<i>Option A</i>		
Complete the following course:		
HUSV 2970	Research Methods for Human Services	
<i>Option B</i>		

Complete the following and one additional HUSV course:

SOCL 2321	Research Methods in Sociology	
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**Human Services Elective**

Complete three additional HUSV courses. 12

**Senior Capstone <sup>1</sup>**

HUSV 4700	Senior Seminar in Human Services	4
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<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

**Sociology Requirements**

Code	Title	Hours
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**Required Sociology Courses**

SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4

**Introductory Electives**

Complete two of the following: 8

ANTH 1101	Peoples and Cultures	
SOCL 1120	Society and Health	
SOCL 1228	Social Problems	
SOCL 1241	Violence and Society	
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 1290	Juvenile Delinquency	
SOCL 1295	Drugs and Society	

**Intermediate-Level Elective**

Complete two of the following: 8

ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
ANTH 2305	Global Markets and Local Culture	
SOCL 2268	Social Movements	
SOCL 2270	Race and Ethnic Relations	
SOCL 2358	Current Issues in Cities and Suburbs	
SOCL 3441	Sociology of Health and Illness	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3487	Applied Sociology: Practice and Theory	

**Advanced-Level Elective**

Complete one of the following: 4

ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
ANTH 4580	Special Topics in Anthropology	
SOCL 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	
<b>Senior Seminar <sup>2</sup></b>		
SOCL 4600	Senior Seminar	4

<sup>2</sup> With permission of the sociology head adviser, the student may complete human services capstone Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

**Human Services/Sociology Integrative Course**

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Human Services and Sociology Combined Major Credit Requirement**

Complete a minimum of 78 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Four Years, No Co-op**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	HUSV 2300	4				
SOCL 1101	4	SOCL Introductory Elective 2	4				
SOCL Introductory Elective 1	4	HSVC elective	4				
		16		16		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	AMSL 2102	4	Vacation	0	Vacation	0
Elective	4	DEAF 2700	4				
HUSV Elective	4	Elective	4				
HUSV Elective	4	Elective	4				
		16		16		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 2355	4	Research (choose one of the following)	4	Vacation	0	Vacation	0
HUSV 3570	4	HUSV 2971	4				
SOCL 2320 (elective)	4	SOCL 2321	4				
SOCL 3300	4	Elective	4				

SOCL Intermediate-Level Elective	4		
ENGW 3315	4		
	16	16	0

**Year 4**

Fall	Hours	Spring	Hours
HUSV 3900	4	HUSV 4700	4
HUSV 4994	6	SOCL 4600	4
Elective	4	Elective	4
SOCL Advanced-Level Elective	4	Elective	4
	18	16	

Total Hours: 130

### International Affairs and Cultural Anthropology, BA

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 state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### International Affairs Requirements

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement.

Code	Title	Hours
<b>Required Courses</b>		
INTL 1101	Globalization and International Affairs	4

INTL 3400	International Conflict and Negotiation	4
POLS 1160	International Relations	4
ECON 1115	Principles of Macroeconomics	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	

### International Affairs Elective

Please choose one of the following: 4

INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives

### Global Dynamics

Complete one of the following. Courses are divided into thematic groups to aid students in deciding which courses to take and have no bearing on major requirements: 4

*Environment*

ENVR 1110	Global Climate Change
ENVR 2515	Sustainable Development
INTL 5100	Climate and Development
SOCL 1246	Environment and Society

*Law, Diplomacy, and Global Governance*

COMM 2303	Global and Intercultural Communication
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 5200	Political Economy: Interdisciplinary Perspectives
POLS 1155	Comparative Politics
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
POLS 3409	Global Governance
POLS 4910	Model United Nations

*Human Rights and Social Justice*

HIST 2373	Gender and Sexuality in World History
INTL 2400	Politics of Islam and Gender
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
LPSC 2302	Global Human Rights: A Social and Economic Perspective
PHIL 5001	Global Justice

*Conflict and Security*

CRIM 4630	Political Crime and Terrorism
HIST 1206	Drug Trade and Drug War: History, Security, Culture
HIST 1389	History of Espionage 1: Antiquity to World War II
HIST 1390	History of Espionage 2: Cold War Spies
HIST 3330	The Global Cold War
HIST 3334	Assassinations in World History
HIST 3335	History of Modern Terrorism
JRNL 3300	Covering Conflicts: Peace, War, and the Media

or INTL 3300	Covering Conflicts: Peace, War, and the Media
PHIL 5001	Global Justice
POLS 2282	The Holocaust and Comparative Genocide
POLS 3408	International Security
POLS 3418	Nationalism
POLS 3420	U.S. National Security Policy
POLS 3423	Terrorism and Counterterrorism
POLS 3430	Revolution, Civil War, and Insurrection
POLS 4918	Model NATO
<i>Globalization</i>	
ANTH 2305	Global Markets and Local Culture
ANTH 2315	Religion and Modernity
ECON 3290	History of the Global Economy
ECON 4635	International Economics
ENGL 2450	Postcolonial Literature
HIST 2211	The World Since 1945
HIST 2311	Colonialism/Imperialism
INTB 3310	Cultural Aspects of International Business
INTL 2240	Global Population and Development
INTL 2480	Women and World Politics
or WMNS 2480	Women and World Politics
INTL 3200	Cities in a Global Context
INTL 5200	Political Economy: Interdisciplinary Perspectives
LPSC 2302	Global Human Rights: A Social and Economic Perspective
POLS 1160	International Relations
POLS 2370	Religion and Politics
POLS 3405	International Political Economy
POLS 3406	International Law
SOCL 3465	Globalization and the Evolution of Human Societies
<i>Population, Migration, and Diaspora</i>	
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora
ANTH 1101	Peoples and Cultures
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804
INTL 2240	Global Population and Development
INTL 2400	Politics of Islam and Gender
INTL 3200	Cities in a Global Context
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1271	Sex in Judaism, Christianity, and Islam
<i>Development</i>	
ANTH 2305	Global Markets and Local Culture
ECON 1291	Development Economics
ECON 3404	International Food Policy
ENTR 2206	Global Social Enterprise
ENVR 2515	Sustainable Development
HIST 2011	Capitalism and Business: A Global History

INTB 1203	International Business and Global Social Responsibility
or INTB 1209	International Business and Global Social Responsibility
INTL 2240	Global Population and Development
INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations
<i>Communication and Media</i>	
COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

### International 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 regional analysis courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses:	8

#### Africa

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

#### Asia

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture

CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture
HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

**Europe**

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

**Latin America**

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1240	Latin American Film
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

**Middle East**

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate-level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Anthropology Major Requirements**

*Note:* At least nine anthropology courses must be taken to complete the International Affairs and Cultural Anthropology program.

Code	Title	Hours
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Anthropology Electives</b>		
Complete three courses in the following range, one of which must be numbered 4000 or above. One study-abroad course may also count toward this requirement with prior permission from the department:		12
ANTH 2300 to ANTH 4999		
<b>Advanced Area Courses</b>		
Complete two of the following:		8
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Integrative Requirements**

*Note:* If International Affairs courses are taken in both the Research Methods and Capstone areas, then an additional Anthropology Elective is required.

Code	Title	Hours
<b>Research Methods</b>		
INTL 2718	Research Methods in International Affairs	4
or ANTH 3410	Ethnographic Field Experience	
<b>Global Markets</b>		



ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
ANTH 4600 or INTL 4700	Senior Seminar Senior Capstone Seminar in International Affairs	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.

### International Affairs and 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	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation		Vacation	
INTL 1101	4	ECON 1115 or HIST 2211	4				
ENGW 1111	4	ANTH 2305	4				
ANTH 1101	4	Elective	4				
Foreign Language Core Course	4						
		17			16	0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 2718 or ANTH 3410	4	ANTH 3421	4	Vacation		Co-op	
Elective	4	Elective	4				
Elective	4	Elective	4				
Foreign Language Core Course	4	Elective	4				
		16			16	0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		INTL 3400	4	Elective	4	Co-op	
		ENGW 3315	4	Elective	4		
		Elective	4				
		Elective	4				
		0			16	8	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		0			16	8	

	Elective	4		
	0	16	8	0
Year 5				
Fall	Hours	Spring	Hours	
Co-op		INTL 4700 or ANTH 4600	4	
		Elective	4	
		Elective	4	
		Elective	4	
		0	16	

Total Hours: 129

#### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 1000	1	POLS 1160	4	Vacation		Vacation	
INTL 1101	4	ECON 1115 or HIST 2211	4				
ENGW 1111	4	ANTH 2305	4				
ANTH 1101	4	Elective	4				
Foreign Language Core Course	4						
		17			16	0	
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 2718 or ANTH 3410	4	Co-op		Co-op		Vacation	
ANTH 3421	4						
Elective	4						
Foreign Language Core Course	4						
		16			0	0	
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
INTL 3400	4	Co-op		Co-op		Elective	4
ENGW 3315	4					Elective	4
Elective	4						
Elective	4						
		16			0	0	
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Elective	4	Co-op		Co-op		Elective	4
Elective	4					Elective	4
Elective	4						
Elective	4						
		16			0	0	
Year 5							
Fall	Hours	Spring	Hours				
Elective	4	INTL 4700 or ANTH 4600	4				
Elective	4	Elective	4				
Elective	4	Elective	4				

Elective	4	Elective	4
	16		16

Total Hours: 129

## 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. 46).

### BA Language Requirements

All BA students are required to complete the BA language requirements (p. 45).

### NUPath Requirements

All undergraduate students are required to complete the NUPath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

NUPath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Difference and Diversity (DD) are met through the major course requirements.

NUPath requirements Creative Expression/Innovation (EI), Analyzing and Using Data (AD), and Ethical Reasoning (ER) may be met through electives in the major.

NUPath requirements Natural and Designed World (ND) and Formal and Quantitative Reasoning (FQ) must be met through general electives.

### Media and Screen Studies Requirements

Code	Title	Hours
<b>Media and Screen Studies Common Requirements</b>		
MSCR 1220	Media, Culture, and Society	4
MSCR 1320	Media and Social Change	4
or MSCR 1420	Media History	
<b>Foundation Course</b>		
Complete one of the following:		4
MSCR 1230	Introduction to Film Production	
MSCR 2220	Understanding Media	

<b>Diversity or Globalization Course</b>		
Complete one of the following:		4
MSCR 3392	Gender and Film	
MSCR 2325	Global Media	
MSCR 2505	Digital Feminisms	
MSCR 3437	Media and Identity	

<b>Writing-Intensive</b>		
Complete two of the following:		8
MSCR 2505	Digital Feminisms	
MSCR 3600	Film Theory	
MSCR 3420	Digital Media Culture	
MSCR 3422	Media Audiences	
MSCR 4208	TV History	

### Media and Screen Studies Electives

Code	Title	Hours
Complete three courses from MSCR or from the following:		12
ARTD 2380	Video Basics	
ARTD 3480	Video: Sound and Image	
ARTD 3485	Experimental Video	
COMM 1450	Sound Production for Digital Media	
COMM 2550	Television Field Production	
COMM 2655	Television Studio Production	
COMM 3655	Digital Editing for TV	
COMM 3750	Special Effects and Postproduction for Television	
COMM 4755	Production Capstone	

### Sociology Requirements

Code	Title	Hours
<b>Core Courses in Sociology</b>		
ANTH 1101	Peoples and Cultures	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
SOCL 4600	Senior Seminar	4

<b>Foundational Competency—Courses Numbered SOCL 1200 to SOCL 2900</b>		
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 Twenty-First-Century Workplace	
SOCL 2268	Social Movements	
SOCL 2270	Race and Ethnic Relations	

<b>Foundational Competency—Courses Numbered 3000 to 4999</b>		
Complete one of the following:		4
ANTH 3120	Consumer Cultures	
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ANTH 4580	Special Topics in Anthropology	
SOCL 3450	Class, Power, and Social Change	

SOCL 3465	Globalization and the Evolution of Human Societies
SOCL 4518	Law and Society in a Digital World
SOCL 4520	Race, Class, and Gender
SOCL 4580	Special Topics in Sociology

**Integrative Requirement**

Code	Title	Hours
<b>Integrative Courses</b>		
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**

**Sample Four Years, Two Co-ops**

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
MSCR 1000	1	MSCR 1320 or 1420	4	Foreign language core course	4	Elective	4	
MSCR 1220	4	MSCR foundation	4	Elective	4	Elective	4	
SOCL 1101	4	Foreign language core course	4					
ANTH 1101	4	SOCL 3300	4					
ENGW 1111	4							
		17			16			8

Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
MSCR diversity/globalization	4	Co-op		Co-op		Elective	4	
MSCR elective	4					Elective	4	
Foreign language core course	4							
EEAM 2000	1							
SOCL 2320	4							
		17			0			0

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2321	4	Co-op		Co-op		Elective	4
SOCL foundational competency elective 1	4					Elective	4

MSCR writing-intensive	4			
MSCR elective	4			
		16	0	0

Year 4			
Fall	Hours	Spring	Hours
SOCL foundational competency elective 2	4	MSCR 3437	4
MSCR elective	4	SOCL 4600	4
MSCR writing-intensive	4	SOCL foundational competency elective	4
SOCL 1246	4	Elective	4
		16	16

Total Hours: 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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Sociology Requirements**

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
ANTH 2305	Global Markets and Local Culture	4
<b>Statistics</b>		
Complete one of the following:		4
SOCL 2320	Statistical Analysis in Sociology	
ENVR 2500	Biostatistics	
<b>Capstone</b>		
Complete one of the following:		
SOCL 4600	Senior Seminar	
ENVS 4997	Senior Thesis	

ENVR 4900	Earth and Environmental Science Capstone
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**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:

SOCL 3000 to SOCL 5999

**Environmental Studies Requirements**

Code	Title	Hours
<b>Science Requirements</b>		
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 the 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: 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 2515	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**

Through this combined major, successful undergraduates develop an awareness of societies within their international, transnational, and global contexts since the early 20th century. The combined major addresses

diverse and cross-disciplinary theories of interstate relations (conflict, cooperation, hierarchies); civil society, transnational advocacy networks, global social movements; and state-society relations (democracy, authoritarianism, social justice and inequalities, citizenship).

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Sociology Requirements**

Code	Title	Hours
<b>Sociology Required Courses</b>		
ANTH 2305	Global Markets and Local Culture	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
or INTL 2718	Research Methods in International Affairs	

**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	Senior Seminar	4
or INTL 4700	Senior Capstone Seminar in International Affairs	

**International Affairs Major Requirements**

Courses used to fulfill major requirements may not be used to satisfy the global dynamics requirement. See department for additional courses.

Code	Title	Hours
<b>Required Courses</b>		
ECON 1115	Principles of Macroeconomics	4
or HIST 2211	The World Since 1945	
or HIST 2311	Colonialism/Imperialism	
INTL 1101	Globalization and International Affairs	4
INTL 3400	International Conflict and Negotiation	4

POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>International Affairs Elective</b>		
Complete one of the following courses:		4
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5100	Climate and Development	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
<b>Global Dynamics</b>		
Complete one of the following courses:		4
<i>Environment</i>		
ENVR 1110	Global Climate Change	
ENVR 2515	Sustainable Development	
INTL 5100	Climate and Development	
SOCL 1246	Environment and Society	
<i>Law, Diplomacy, and Global Governance</i>		
COMM 2303	Global and Intercultural Communication	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
POLS 1155	Comparative Politics	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4910	Model United Nations	
<i>Human Rights and Social Justice</i>		
HIST 2373	Gender and Sexuality in World History	
INTL 2400	Politics of Islam and Gender	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
PHIL 5001	Global Justice	
<i>Conflict and Security</i>		
CRIM 4630	Political Crime and Terrorism	
HIST 1206	Drug Trade and Drug War: History, Security, Culture	
HIST 1389	History of Espionage 1: Antiquity to World War II	
HIST 1390	History of Espionage 2: Cold War Spies	
HIST 3330	The Global Cold War	
JRNL 3300	Covering Conflicts: Peace, War, and the Media	
or INTL 3300	Covering Conflicts: Peace, War, and the Media	
HIST 3334	Assassinations in World History	
HIST 3335	History of Modern Terrorism	
PHIL 5001	Global Justice	
POLS 2282	The Holocaust and Comparative Genocide	
POLS 3408	International Security	

POLS 3418	Nationalism	
POLS 3420	U.S. National Security Policy	
POLS 3423	Terrorism and Counterterrorism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 4918	Model NATO	
<i>Globalization</i>		
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
ECON 3290	History of the Global Economy	
ECON 4635	International Economics	
ENGL 2450	Postcolonial Literature	
HIST 2211	The World Since 1945	
HIST 2311	Colonialism/Imperialism	
INTB 3310	Cultural Aspects of International Business	
INTL 2240	Global Population and Development	
INTL 2480	Women and World Politics	
or WMNS 2480	Women and World Politics	
INTL 3200	Cities in a Global Context	
INTL 5200	Political Economy: Interdisciplinary Perspectives	
LPSC 2302	Global Human Rights: A Social and Economic Perspective	
POLS 1160	International Relations	
POLS 2370	Religion and Politics	
POLS 3405	International Political Economy	
POLS 3406	International Law	
SOCL 3465	Globalization and the Evolution of Human Societies	
<i>Population, Migration, and Diaspora</i>		
AFRS 3424	Epidemiology of Pandemic Diseases and Health Disparities in the African Diaspora	
ANTH 1101	Peoples and Cultures	
HIST 1218	Pirates, Planters, and Patriots: Making the Americas, 1492–1804	
INTL 2240	Global Population and Development	
INTL 2400	Politics of Islam and Gender	
INTL 3200	Cities in a Global Context	
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions	
PHIL 1271	Sex in Judaism, Christianity, and Islam	
<i>Development</i>		
ANTH 2305	Global Markets and Local Culture	
ECON 1291	Development Economics	
ECON 3404	International Food Policy	
ENTR 2206	Global Social Enterprise	
ENVR 2515	Sustainable Development	
HIST 2011	Capitalism and Business: A Global History	
INTB 1203	International Business and Global Social Responsibility	
or INTB 1209	International Business and Global Social Responsibility	
INTL 2240	Global Population and Development	

INTL 5100	Climate and Development
INTL 5200	Political Economy: Interdisciplinary Perspectives
PHTH 5230	Global Health
POLS 3487	Politics of Developing Nations

#### Communication and Media

COMM 2303	Global and Intercultural Communication
INTB 3310	Cultural Aspects of International Business
JRNL 3300	Covering Conflicts: Peace, War, and the Media
or INTL 3300	Covering Conflicts: Peace, War, and the Media
JRNL 5360	Global Reporting
MSCR 2325	Global Media

#### Senior Seminar/Experiential Learning

INTL 4700	Senior Capstone Seminar in International Affairs	4
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#### International Experiential Learning

Complete at least one 'international semester' via study abroad, international internship, international co-op, or two approved short-term programs abroad.

### Regional Analysis Requirement

Code	Title	Hours
	Complete two of the following courses, both of which must be in one region, from the following lists. Select courses taken during a semester study abroad or specific Dialogue of Civilizations courses may count as regional analysis courses pending approval of the international affairs head faculty adviser. See department for additional courses.	8

#### Africa

AFRS 2307	Africa Today
AFRS 2900	Swahili, Culture, and Politics in Kenya
AFRS 3460	Contemporary Government and Politics in Africa
AFRS 4939	Community Health, Culture, and Development in Kenya
ANTH 4510	Anthropology of Africa
ENTR 3308	Business Economic History of South Africa
HIST 1180	African History
HIST 2390	Africa and the World in Early Times
INTL 2464	Natural Resources and Sustainable Development
or AFRS 2464	Natural Resources and Sustainable Development
INTL 2465	The Scope and Dynamics of Conflicts in Africa
or AFRS 2465	The Scope and Dynamics of Conflicts in Africa

#### Asia

ASNS 1150	East Asian Studies
or HIST 1150	East Asian Studies
INTL 4350	Ethnography of Southeast Asia
or ANTH 4350	Ethnography of Southeast Asia
CLTR 1500	Modern Chinese History and Culture
CLTR 1506	Introduction to Chinese Popular Culture
CLTR 1700	Introduction to Japanese Pop Culture

HIST 1246	World War II in the Pacific
HIST 1252	Japanese Literature and Culture
HIST 1253	History of Vietnam Wars
HIST 1500	Modern Chinese History and Culture
HIST 2308	Law, Justice, and Society in Modern China
HIST 2351	Modern Japan
HIST 2360	History of Capitalism in East Asia
PHIL 1275	Hinduism, Buddhism, and Beyond: Eastern Religions
PHIL 1290	Chinese Philosophy and Religion
PHIL 2395	Japanese Buddhism

#### Europe

CLTR 1501	Introduction to French Culture
CLTR 1503	Introduction to Italian Culture
CLTR 1504	Cultural History of Spain
ECON 1293	European Economic History
HIST 1170	Europe: Empires, Revolutions, Wars, and Their Aftermath
HIST 1272	Europe in the Middle Ages, 500–1500
HIST 2280	Hitler, Germany, and the Holocaust
HIST 2370	Renaissance to Enlightenment
HIST 2375	The Tudors, the Stuarts, and the Birth of Modern Britain
HIST 2376	Britain and the British Empire
HIST 4946	Independent Field Research Abroad: Central Europe
POLS 3435	Politics and Governance of Europe and the European Union

#### Latin America

ANTH 4500	Latin American Society and Development
or INTL 4500	Latin American Society and Development
CLTR 1261	Caribbean Literature and Culture
CLTR 1505	Latin American Culture, History, and Politics
CLTR 1240	Latin American Film
CLTR 3715	New Narratives: Latin America after 1989
CLTR 3720	Literature, Arts, and Poverty in Latin America
CLTR 4655	Latin American Literature
HIST 1187	Introduction to Latin American History
HIST 2025	Latin American History through Film
LACS 1220	Latino, Latin American, and Caribbean Studies

#### Middle East

INTL 1150	The Mediterranean World: An Overview
INTL 1160	Middle East Studies
INTL 2011	The Arab Spring and Its Aftermath: Domestic, Regional, and International Challenges
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
PHIL 1270	Judaism, Christianity, and Islam: Abrahamic Religions
PHIL 1280	Islam: Rituals, Traditions, and Debates
PHIL 1285	Jewish Religion and Culture
POLS 3465	Government and Politics in the Middle East
POLS 3470	Arab-Israeli Conflict
POLS 4915	Model Arab League

**Russia**

HIST 1285	Introduction to Russian Civilization
HIST 1286	History of the Soviet Union
SOCL 1215	Understanding Russia

**International Affairs Foreign Language Requirement**

Complete coursework in a language through at least intermediate level two. *Note:* Completing this requirement satisfies the language requirement for the BA degree.

**Integrative Requirements**

Code	Title	Hours
SOCL 3465	Globalization and the Evolution of Human Societies	4

**Sociology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Sociology and International Affairs Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 1000	1	ANTH 1101	4	Vacation		Vacation	
SOCL 1101	4	ENGW 1111	4				
INTL 1101	4	POLS 1160	4				
HIST 2211 or ECON 1115	4	Elective	4				
Foreign Language Course	4						
		17	16		0		0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 3300	4	POLS 1155	4	Vacation		Co-op	
SOCL 2320	4	POLS 1156	0				

Elective	4	SOCL 2321 or INTL 2718	4				
Foreign Language Course	4	ANTH 2305	4				
		Elective	4				
		16	16		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		SOCL 3465	4	Elective	4	Co-op	
		INTL 3400	4	Elective	4		
		ENGW 3315	4				
		Elective	4				
		0	16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Elective	4	Elective	4	Co-op	
		Elective	4	Elective	4		
		Elective	4				
		Elective	4				
		0	16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		SOCL 4600 or INTL 4700	4
		Elective	4
		Elective	4
		Elective	4
		0	16

Total Hours: 129

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 1000	1	ANTH 1101	4	Vacation		Vacation	
SOCL 1101	4	ENGW 1111	4				
INTL 1101	4	POLS 1160	4				
HIST 2211 or ECON 1115	4	Elective	4				
Foreign Language Course	4						
		17	16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 3300	4	Co-op		Co-op		Elective	4
SOCL 2320	4					Elective	4
Foreign Language Course	4						
		Elective	4				
		16	0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
POLS 1155	4	Co-op		Co-op		Elective	4
POLS 1156	0					Elective	4
SOCL 2321 or INTL 2718	4						
ANTH 2305	4						
Elective	4						
	16		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 3465	4	Co-op		Co-op		Vacation	
INTL 3400	4						
ENGW 3315	4						
Elective	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
Elective	4	SOCL 4600 or INTL 4700	4
Elective	4	Elective	4
Elective	4	Elective	4
Elective	4	Elective	4
	16		16

Total Hours: 129

**Sociology and 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. 46).

**BA Language Requirements**

All BA students are required to complete the BA language requirements (p. 45).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Sociology Requirements**

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2268	Social Movements	4
SOCL 3300	Social Theory	4
SOCL 3450	Class, Power, and Social Change	4
<b>Sociology Introductory Electives</b>		
Complete two courses in the following range:		8
SOCL 1200 to SOCL 1999		
<b>Sociology Intermediate Elective</b>		
Complete one course in the following range:		4
SOCL 2000 to SOCL 3999		
<b>Sociology Advanced Elective</b>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 5999		
<b>Statistics and Methods</b>		
Complete one of the following sets:		8
SOCL 2320 and SOCL 2321	Statistical Analysis in Sociology and Research Methods in Sociology	
POLS 2400 and POLS 2399	Quantitative Techniques and Research Methods in Political Science	

**Political Science Requirements**

Code	Title	Hours
<b>Political Science Required Courses</b>		
POLS 1150	American Government	4
POLS 1155	Comparative Politics	4
POLS 1160	International Relations	4
<b>Political Thought</b>		
Complete one of the following:		4
POLS 2325	Ancient Philosophy and Political Thought	
POLS 2328	Modern Political Thought	
POLS 2330	American Political Thought	
POLS 2332	Contemporary Political Thought	
<b>Political Science Electives</b>		
Complete five courses in the following range:		20
POLS 2000 to POLS 5999		

**Political Science Concentrations (Optional)**

If you are working toward one of the following concentrations, declare it with your adviser so that it may be added to your record.

- American Political Institutions (p. 1101)
- Campaigns and Elections (p. 1101)
- Comparative Politics (p. 1101)
- Identity, Culture, and Politics (p. 1101)
- International Relations and Diplomacy (p. 1101)
- Law and Legal Studies (p. 1101)

- Public Policy (p. 1101)
- Security Studies (p. 1102)

### 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 Inequalities	4
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 3320	Politics and Mass Media	
POLS 3324	Law and Society	
POLS 3418	Nationalism	

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Program Requirement

128 total semester hours required

#### CONCENTRATION IN AMERICAN POLITICAL INSTITUTIONS

Code	Title	Hours
Complete four of the following:		16
POLS 2350	State and Local Politics	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3307	Public Policy and Administration	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3160	Campaign Strategy	
POLS 3162	Local Campaigns and Elections	

#### CONCENTRATION IN CAMPAIGNS AND ELECTIONS

Code	Title	Hours
<b>Required Courses</b>		
POLS 3160	Campaign Strategy	4
POLS 3302	Judicial Process and Behavior	4
<b>Campaigns and Elections Electives</b>		
If POLS 4947 was replaced by a co-op or internship, an additional elective must be taken.		
Complete two of the following:		8
POLS 2345	Urban Policies and Politics	
POLS 2350	State and Local Politics	
POLS 2355	Intergovernmental Relations	
POLS 3310	Public Opinion, Voting, and Elections	
POLS 3162	Local Campaigns and Elections	
POLS 3320	Politics and Mass Media	
POLS 3304	Presidential Nominating Process	

#### CONCENTRATION IN COMPARATIVE POLITICS

Code	Title	Hours
<b>Theoretical Requirement</b>		
Complete one of the following:		4
POLS 2370	Religion and Politics	
POLS 3418	Nationalism	
POLS 3430	Revolution, Civil War, and Insurrection	
POLS 3487	Politics of Developing Nations	
<b>Regional Requirements</b>		
Complete two of the following:		8
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3465	Government and Politics in the Middle East	
POLS 3470	Arab-Israeli Conflict	
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4915	Model Arab League	
POLS 4918	Model NATO	
POLS 4937	Dialogue of Civilizations: Government and Politics Abroad	

#### CONCENTRATION IN IDENTITY, CULTURE, AND POLITICS

Code	Title	Hours
<b>Core Course</b>		
POLS 3418	Nationalism	4
<b>Electives</b>		
Complete three of the following:		12
POLS 2360	Politics of Poverty	
POLS 2368	Music and Politics in America and Abroad	
POLS 2370	Religion and Politics	
POLS 2375	Gender and Politics	
POLS 3309	Lesbian, Gay, Bisexual, and Transgender Issues in Public Policy	
POLS 3324	Law and Society	

#### CONCENTRATION IN INTERNATIONAL RELATIONS AND DIPLOMACY

Code	Title	Hours
<b>Experiential/Practicum Requirement</b>		
Complete one of the following:		4
POLS 4910	Model United Nations	
POLS 4915	Model Arab League	
POLS 4938	Dialogue of Civilizations: International Politics Abroad	
<b>Core Courses</b>		
Complete three of the following:		12
POLS 3405	International Political Economy	
POLS 3406	International Law	
POLS 3408	International Security	
POLS 3435	Politics and Governance of Europe and the European Union	
POLS 3470	Arab-Israeli Conflict	

**CONCENTRATION IN LAW AND LEGAL STUDIES**

Code	Title	Hours
Complete four of the following:		16
POLS 2330	American Political Thought	
POLS 3300	The U.S. Congress	
POLS 3302	Judicial Process and Behavior	
POLS 3324	Law and Society	
POLS 3406	International Law	
POLS 3409	Global Governance	
POLS 4500	U.S. Constitutional Law	
POLS 4505	U.S. Civil Liberties	

**CONCENTRATION IN PUBLIC POLICY**

Code	Title	Hours
<b>Core Requirement</b>		
POLS 3307	Public Policy and Administration	4
<b>Electives</b>		
Complete three of the following:		12
POLS 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 3430	Revolution, Civil War, and Insurrection	
POLS 3470	Arab-Israeli Conflict	
POLS 3487	Politics of Developing Nations	

**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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Sociology Major Requirements**

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Advanced Methods Requirement</b>		
Complete one of the following:		4
ANTH 3410	Ethnographic Field Experience	
DA 5030	Introduction to Data Mining/Machine Learning	
DS 4400	Machine Learning and Data Mining 1	
DS 3000	Foundations of Data Science	
HINF 5301	Personal Health Technologies: Field Deployment and System Evaluation	
POLS 2400	Quantitative Techniques	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Senior Seminar</b>		
SOCL 4600	Senior Seminar	4

**Required Sociology Electives**

Code	Title	Hours
<b>Introductory-Level Electives</b>		
Complete two courses in the following range:		8
SOCL 1100 to SOCL 1999		
<b>Intermediate-Level Electives</b>		
Complete three courses in the following range:		12
SOCL 2000 to SOCL 3999		
<b>Elective in Social Change</b>		
Complete one of the following:		4
SOCL 1260	Gender in a Changing Society	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2268	Social Movements	
SOCL 3450	Class, Power, and Social Change	
<b>Elective in Social Inequality</b>		
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	

SOCL 1275	Social Stratification
SOCL 2270	Race and Ethnic Relations

**Advanced-Level Electives**

Complete two courses in the following range: **8**

SOCL 4000 to SOCL 4999
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**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. **20**

**Sociology Experiential Learning Requirement**

**Code Title Hours**  
Complete one of the following courses or a study abroad or a co-op: **4**

SOCL 3487	Applied Sociology: Practice and Theory	
SOCL 4971	Junior/Senior Honors Project 2	

**Sociology Major Grade Requirement**

A GPA average of 2.000 across all major courses is required.

**Sociology Major Credit Requirement**

Complete 88 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
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-level elective	4				
ENGW 1111	4	Elective	4				
MATH 1215	4	Elective	4				
ANTH 1101	4						
		17			16	0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2320	4	SOCL 1200-level elective	4	Vacation	0	Co-op	0
SOCL 3300	4	SOCL 2321	4				
Elective	4	SOCL intermediate-level elective	4				
Elective	4	Elective	4				
		EESH 2000	1				
		16			17	0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	ENGW 3315	4	Social science elective	4	Co-op	0
		SOCL intermediate-level elective	4	Social science elective	4		

SOCL intermediate-level elective	4				
Social science elective	4				
		0			16
					8
					0

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	SOCL intermediate-level elective	4	Social science elective	4	Co-op	0

Social science elective	4	Elective	4		
SOCL intermediate-level elective	4				
SOCL advanced-level elective	4				
		0			16
					8
					0

Year 5							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	SOCL advanced-level elective	4				
		Elective	4				
		Social science elective	4				
		SOCL 4600	4				
		0			16	0	

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-level elective	4				
ENGW 1111	4	Elective	4				
MATH 1215	4	Elective	4				
ANTH 1101	4						
		17			16	0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2320	4	Co-op	0	Co-op	0	SOCL 1200-level elective	4
SOCL 3300	4					SOCL intermediate-level elective	4
Social science elective	4						
Elective	4						

EESH 2000	1						
	17		0		0		8
<b>Year 3</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
ENGW 3315	4	Co-op	0	Co-op	0	SOCL intermediate-level elective	4
SOCL 2321	4					Elective	4
SOCL intermediate-level elective	4						
Social science elective	4						
	16		0		0		8
<b>Year 4</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>	<b>Summer 1</b>	<b>Hours</b>	<b>Summer 2</b>	<b>Hours</b>
SOCL intermediate-level elective	4	Co-op	0	Co-op	0	Vacation	0
Social science elective	4						
Elective	4						
SOCL intermediate-level elective	4						
	16		0		0		0
<b>Year 5</b>							
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>				
Elective	4	SOCL 4600	4				
SOCL advanced-level elective	4	Social science elective	4				
Social science elective	4	Elective	4				
Social science elective	4	SOCL advanced-level elective	4				
	16		16				

**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. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Cultural Anthropology Major Requirements**

Code	Title	Hours
<b>Cultural Anthropology</b>		
SOCL 1101	Introduction to Sociology	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 4600	Senior Seminar	4

**Advanced Area Courses**

Complete two of the following. Additional courses taken in this section may be used as electives. 8

ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Anthropology Electives**

Complete eight ANTH courses. Two study-abroad courses may count toward this requirement with prior permission from the department. 32

**Social Science Electives**

Complete three social science courses from the following subject areas. Social science electives may not include music or art: AFRS, AFAM, CRIM, ECON, HUSV, HIST, INTL, LING, LPSC, POLS, PSYC, or SOCL. 12

<sup>1</sup> Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

**Cultural Anthropology Major Grade Requirement**

A cumulative GPA of 2.000 for all major courses is required.

**Cultural Anthropology Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required



**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 1000	1	SOCL 1101	4	Vacation	0	Vacation	0
ANTH 1101	4	Anthropology elective	4				
Social science elective	4	MATH 1215	4				
Elective	4	ENGW 1111	4				
Elective	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2300	4	ANTH 2305	4	Vacation	0	Co-op	0
Anthropology elective	4	Anthropology elective	4				
Social science elective	4	Elective	4				
Elective	4	Social science elective	4				
		EESH 2000	1				
	16		17		0		0

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Advanced area ANTH 4500-ANTH 4515	4	Social science elective	4	Co-op	0
		Anthropology elective	4	ENGW 3315	4		
		Social science elective	4				
		Anthropology elective	4				
	0		16		8		0

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	Anthropology elective	4	Social science elective	4	Co-op	0
		Anthropology elective	4	Elective	4		
		Advanced area ANTH 4500-ANTH 4515	4				
		Elective	4				
	0		16		8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op	0	ANTH 4600	4

Anthropology elective	4
Elective	4
Elective	4
0	16

Total Hours: 130

**Five Years, Three Co-ops in Spring/Summer 1**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 1000	1	SOCL 1101	4	Vacation	0	Vacation	0
ANTH 1101	4	Anthropology elective	4				
Social science elective	4	ENGW 1111	4				
Elective	4	MATH 1215	4				
Elective	4						
	17		16		0		0

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2300	4	Co-op	0	Co-op	0	Anthropology elective	4
Anthropology elective	4					Social science elective	4
Social science elective	4						
Elective	4						
	16		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305	4	Co-op	0	Co-op	0	Anthropology elective	4
Anthropology elective	4					ENGW 3315	4
Social science elective	4						
Elective	4						
EESH 2000	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Anthropology elective	4	Co-op	0	Co-op	0	Vacation	0
Elective	4						
Advanced area ANTH 4500-ANTH 4515	4						
Elective	4						
	16		0		0		0

**Year 5**

Fall	Hours	Spring	Hours
Advanced area ANTH 4500-ANTH 4515	4	ANTH 4600	4
Social science elective	4	Social science elective	4
Anthropology elective	4	Anthropology elective	4
Elective	4	Elective	4
	16		16

Total Hours: 130

**Computer Science and Sociology, BS**

The social aspects to computing continue to grow, primarily with respect to communication and the internet. The computer science and sociology combined major examines this significant impact on society and how people communicate and share culture. Students will have an opportunity to gain a solid programming foundation, as well as the practical and theoretical skills needed to address the complex social and cultural issues in a period of far-reaching social change.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUPath Requirements**

All undergraduate students are required to complete the NUPath Requirements (p. 42).

**Computer Science Courses**

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200	First Year Seminar	1
CS 1210	Professional Development for Khoury Co-op	1
<b>Computer Science Fundamental Courses</b>		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2500 and CS 2501	Fundamentals of Computer Science 1 and Lab for CS 2500	5
CS 2510 and CS 2511	Fundamentals of Computer Science 2 and Lab for CS 2510	5
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Database Design	4
CS 3500	Object-Oriented Design	4
IS 2000	Principles of Information Science	4
<b>Computer Science Writing-Intensive Requirement</b>		

Complete one of the following:		4
CS 4500 or CS 4530	Software Development Fundamentals of Software Engineering	
IS 3500	Information System Design and Development	
DS 4200	Information Presentation and Visualization (Take DS 3000 either as a prerequisite of or concurrently with DS 4200.)	

<b>Presentation Requirement</b>		
THTR 1170	The Eloquent Presenter	1

**Khoury Elective Courses**

With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.

Complete 12 credits of upper-division CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:	12
CS 2500 or higher, except CS 5010	
CY 2000 or higher, except CY 4930	
DS 2500 or higher, except DS 4900	
IS 2000 or higher, except IS 4900	

**Sociology Courses**

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Sociology Electives</b>		
Complete one sociology elective in each of the following ranges:		12
Introductory elective: SOCL 1000 to SOCL 1999		
Intermediate elective: SOCL 2000 to SOCL 3999		
Advanced elective: SOCL 4000 to SOCL 4999		

<b>Sociology Required Capstone</b>		
SOCL 4600	Senior Seminar	4

**Integrative Course Requirement**

Code	Title	Hours
Complete one of the following:		
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111 or ENGW 1102	First-Year Writing First-Year Writing for Multilingual Writers	4

**Advanced Writing in the Disciplines**

Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

### Required General Electives

Code	Title	Hours
Complete 32 credits of general electives.		32

### Khoury College GPA Requirements

Minimum 2.000 GPA required in all CS, CY, DS and IS courses

### Sociology GPA Requirements

2.000 average GPA requirement across all sociology classes

### NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Writing-Intensive in the Major
- Writing in the First Year
- Advanced Writing in the Disciplines
- Interpreting Culture
- Understanding Societies and Institutions
- Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

### Program Requirement

133 total semester hours required

### Plan of Study

#### Sample Patterns:

#### Four Years, Two Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3200	4	Vacation	
CS 2500 and CS 2501	5	IS 2000	4	CS 3500	4		
CS 1200	1	SOCL 2320	4				
ENGW 1111	4	ANTH 1101	4				
SOCL 1101	4						
19		17		8		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
CS 1210	1					Elective	4
SOCL 2321	4						
ANTH 2305	4						
Elective	4						
17		0		0		8	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
SOCL 3300	4					Elective	4
Sociology introductory elective	4						
Elective	4						
THTR 1170	1						
17		0		0		8	

Year 4					
Fall	Hours	Spring	Hours	Summer 1	Hours
Khoury elective 2	4	SOCL 4600	4	Elective	4
Sociology intermediate elective	4	CS writing-intensive requirement	4	Elective	4
Elective	4	Sociology advanced elective	4		
Integrative requirement	4	Khoury elective 3	4		
16		16		8	

Total Hours: 134

### Five Years, Three Co-ops in Spring/Summer 1

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	Vacation		Vacation	
CS 2500 and CS 2501	5	IS 2000	4				
CS 1200	1	SOCL 2320	4				
ENGW 1111	4	ANTH 1101	4				
SOCL 1101	4						
19		17		0		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	Co-op		Co-op		Vacation	
CS 3500	4						
CS 1210	1						
SOCL 2321	4						
ANTH 2305	4						
17		0		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3200	4	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
Elective	4					Elective	4
SOCL 3300	4						
Sociology introductory elective	4						
THTR 1170	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
Sociology intermediate elective	4					Elective	4
Elective	4						
Integrative requirement	4						
	16		0		0		8

**Year 5**

Fall	Hours	Spring	Hours
Khoury elective 2	4	SOCL 4600	4
Sociology advanced elective	4	CS writing-intensive requirement	4
Elective	4	Khoury elective 3	4
Elective	4	Elective	4
	16		16

Total Hours: 134

**Criminal Justice and Sociology, BS**

This combined major educates students in criminal justice and sociology and in the interface between the two disciplines. The scope and sequence of sociology courses provide students with a foundation in social theory and social systems. Criminal justice courses provide a foundation for understanding individual and systemic aspects of criminology and criminal justice. Students successfully completing this program should be able to understand the ways that crime and the justice system are situated in larger social systems and structures.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Criminal Justice Requirements**

Code	Title	Hours
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**Criminal Justice Core Requirements**

CRIM 1100	Introduction to Criminal Justice	4
CRIM 2100	Criminal Due Process	4
CRIM 2200	Criminology	4

**Thematic Elective**

Complete one course in the following range:	4
CRIM 1300 to CRIM 1700	

**Survey Elective**

Complete one course in the following range:	4
CRIM 3010 to CRIM 3500	

**System-Wide Elective**

Complete one course in the following range:	4
CRIM 4010 to CRIM 4040	

**Criminal Justice Electives**

Complete two additional CRIM courses.	8
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**Sociology Requirements**

Code	Title	Hours
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Complete a minimum of nine courses in sociology from the requirements below.

**Sociology Requirements**

SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4

**Sociology Introductory Electives**

Complete two courses in the following range:	8
SOCL 1200 to SOCL 1999	

**Sociology Intermediate Electives**

Complete two courses in the following range:	8
SOCL 2000 to SOCL 3999	

**Sociology Advanced Elective**

Complete one course in the following range:	4
SOCL 4000 to SOCL 5999	

**Introduction, Methods, and Statistics**

Code	Title	Hours
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**Introduction**

Complete one of the following:	1	
CRIM 1000	Criminal Justice at Northeastern	
SOCL 1000	Sociology at Northeastern	

**Research Methods**

SOCL 2321	Research Methods in Sociology	4
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**Statistics**

CRIM 3700	Analyzing and Using Data on Crime and Justice	4
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**Supporting Courses**

Code	Title	Hours
<b>Computer or Data Science</b>		
Complete one of the following:		4
CS 1100	Computer Science and Its Applications	4
or DS 2000 and DS 2001	Programming with Data and Data Science Programming Practicum	
<b>Mathematics</b>		
Complete one of the following:		4
MATH 1215	Mathematical Thinking	
MATH 1231	Calculus for Business and Economics	
MATH 1241	Calculus 1	
<b>Co-op Integration Requirements</b>		
Complete before the first co-op:		1
EESH 2000	Professional Development for Co-op	
Complete after the first co-op:		1
CRIM 3000	Co-op Integration Seminar 2	
Complete after the second co-op:		1
CRIM 4000	Co-op Integration Seminar 3	

**Integrative Requirement**

Code	Title	Hours
<b>Senior Capstone Requirement</b>		
CRIM 4949	Senior Capstone Seminar	4
or SOCL 4600	Senior Seminar	

**Integrative Elective Courses**

Complete one of the following:		4
CRIM 3030	Global Criminology	
CRIM 4010	Gender, Crime, and Justice	
CRIM 4020	Race, Crime, and Justice	
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 1228	Social Problems	

**Program Requirement**

128 total semester hours required

**Plan of Study****Four Years, Two Co-ops****Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 1000 or SOCL 1000	1	SOCL 3300	4	Vacation	0	Elective	4
CRIM 1100	4	Criminology thematic elective	4			Elective	4
SOCL 1101	4	Sociology introductory elective	4				
CS 1100 or DS 2000	4	Elective	4				
MATH 1215	4						
	17		16		0		8

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 2100	4	Co-op		Co-op		Criminology survey elective	4
CRIM 2200	4					Sociology intermediate elective	4
Sociology introductory elective	4						
Elective	4						
EESH 2000	1						
	17		0		0		8

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CRIM 3600 or SOCL 2321	4	Co-op		Co-op		Elective	4
CRIM 3700 or SOCL 2320	4					Criminal justice elective	4
Elective	4						
Elective	4						
CRIM 3000	1						
	17		0		0		8

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Criminology system-wide elective	4	CRIM 4949 or SOCL 4600	4	Elective	4		4
Sociology advanced elective	4	Integrative course 2	4				
Integrative course 1	4	Elective	4				
Criminal justice elective	4	Elective	4				
	16		16		4		

Total Hours: 127

**Health Science and Sociology, BS**

The combined Bachelor of Science in Health Science and Sociology integrates social scientific perspectives to the study of health, illness, and healthcare. Students explore basic sociological concepts relevant for the study of health and healthcare, such as social construction and medicalization. Students explore why, for instance, despite having the most expensive healthcare system, the United States ranks comparatively low in life expectancy and health and well-being outcomes. Provides students with an opportunity to explore the ways that societal factors such as race, class, and gender interplay with health, healthcare, and health disparities.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond

specific college and major requirements to satisfy graduation credit requirements.

## University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

## Health Science Requirements

Code	Title	Hours
<b>Public Health Core</b>		
PHTH 1260 or PHTH 1261	The American Healthcare System Comparative Healthcare Systems	4
PHTH 2300 or PHTH 2301	Communication Skills for the Health Professions Communication Skills for the Health Professions—Global	4
PHTH 2350 or PHTH 2351	Community and Public Health Community and Public Health - Global	4
PHTH 2515	Healthcare Policy and Administration	4
PHTH 4120	Global Perspectives on Discrimination and Health	4
PHTH 4202	Principles of Epidemiology in Medicine and Public Health	4
PHTH 4540	Health Education and Program Planning	4
<b>Supporting Courses for Health Science</b>		
PSYC 1101	Foundations of Psychology	4
BIOL 1111 and BIOL 1112	General Biology 1 and Lab for BIOL 1111	5
BIOL 1113 and BIOL 1114	General Biology 2 and Lab for BIOL 1113	5
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5

## Sociology Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 3300	Social Theory	4
SOCL 2321	Research Methods in Sociology	4
<b>Cultural Anthropology</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Social Change Selective</b>		
Complete one of the following:		4
SOCL 1260	Gender in a Changing Society	
SOCL 2268	Social Movements	
SOCL 3450	Class, Power, and Social Change	
<b>Social Inequality Selective</b>		
Complete one of the following:		4
SOCL 1245	Sociology of Poverty	
SOCL 2225	Sociology of Disability	

SOCL 2270 Race and Ethnic Relations

### Lower-Level Elective

Complete one of the following: 4

SOCL 1000 to SOCL 3999

### Advanced Elective

Complete one of the following: 4

SOCL 4000 to SOCL 4999

## Supporting Courses

Code	Title	Hours
<b>Introduction to College</b>		
Complete one of the following:		1
HSCI 1000	College: An Introduction	
SOCL 1000	Sociology at Northeastern	
<b>Writing in the First Year</b>		
ENGW 1111	First-Year Writing	4
<b>Statistics</b>		
Complete one of the following:		4
PHTH 2210	Foundations of Biostatistics	
SOCL 2320	Statistical Analysis in Sociology	
<b>Co-op Preparation (Based on Home College)</b>		
Complete one of the following:		1
HSCI 2000	Professional Development for Bouvé Co-op	
EESH 2000	Professional Development for Co-op	
<b>Advanced Writing in the Discipline</b>		
Complete one of the following:		4
ENGW 3306	Advanced Writing in the Health Professions	
ENGW 3308	Advanced Writing in the Social Sciences	
<b>NUPath: Ethical Reasoning</b>		
PHIL 1165	Moral and Social Problems in Healthcare	4
<b>Capstone (Based on Home College)</b>		
Complete one of the following:		4
HSCI 4720	Health Science Capstone—Service (Prerequisite course HSCI 4700))	
HSCI 4730	Health Science Capstone—Research (Prerequisite course HSCI 4700)	
SOCL 4600	Senior Seminar	
<b>Open Electives</b>		<b>24</b>

## Integrative Requirement

Code	Title	Hours
Choose one of the courses below:		4
SOCL 3441	Sociology of Health and Illness	
ANTH 3441	Medical Anthropology	

## Health Sciences GPA Requirement

A grade of C or higher is required for all BIOL, CHEM, HLTH, HSCI, MATH, and PHTH courses.

## Program Requirement

133 total semester hours required



## Plan of Study Four Years, One Co-op Plan

Year 1			
Fall	Hours	Spring	Hours
HSCI 1000 or SOCL 1000	1	BIOL 1113	4
PHTH 1260	4	BIOL 1114	1
BIOL 1111	4	ENGW 1111	4
BIOL 1112	1	Elective	4
PSYC 1101	4	CHEM 1161 and CHEM 1162 and CHEM 1163	5
SOCL 1101	4		
	18		18

Year 2					
Fall	Hours	Spring	Hours	Summer 1	Hours
Public health core	4	SOCL 3300	4	Public health core	4
ANTH 1101	4	SOCL 2321	4	PHIL 1165	4
PHTH 2210 or SOCL 2321	4	Social change or social inequality selective	4		
Lower-level sociology elective	4	Public health core	4		
	16		16		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HSCI 2000 or EESH 2000	1	Co-op		Co-op		ENGW 3306 or 3308	4
ANTH 2305	4					PHTH 4540	4
Public health core	4						
Social inequality and social change selective	4						
Open electives	4						
	17		0		0		8

Year 4			
Fall	Hours	Spring	Hours
Public health core	4	Capstone course	4
SOCL 3441	4	Open electives	12
Advanced sociology elective	4		

Open electives	4	
	16	16

Total Hours: 133

## Four Years, Two Co-ops Plan

Year 1					
Fall	Hours	Spring	Hours	Summer 1	Hours
HSCI 1000 or SOCL 1000	1	ANTH 1101	4	PHTH 2350	4
PHTH 1260	4	BIOL 1113	4	Open Elective	4
PSYC 1101	4	BIOL 1114	1		
BIOL 1111	4	ENGW 1111	4		
BIOL 1112	1	CHEM 1161 and CHEM 1162 and CHEM 1163	5		
SOCL 1101	4				
	18		18		8

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
PHTH 2210 or SOCL 2321	4	Co-op		Co-op		ENGW 3306	4
Public health core	4			Open elective	4	PHIL 1165	4
HSCI 2000 or EESH 2000	1						
SOCL 2321	4						
SOCL 3300	4						
	17		0		4		8

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305	4	Co-op		Co-op		PHTH 4540	4
SOCL 3441	4			Open elective	4	Public health core	4
Lower-level sociology elective	4						
Public health core	4						
	16		0		4		8

Year 4			
Fall	Hours	Spring	Hours
Social change or social inequality selective	4	Capstone course	4
Advanced sociology elective	4	Public health core	4

HSCI 4700 (if student will complete an HSCI capstone)	0 Social change or social inequality selective	4
Open electives	8 Open electives	4
		16
		16

Total Hours: 133

## Human Services and Sociology, BS

Students pursuing a combined degree in human services and sociology will integrate the theoretical understandings of these two fields to better understand organizational and group behavior and their implications for individuals and communities utilizing human services. The human services major prepares students for careers in social change by providing students with the theoretical and skill-based background necessary for practice and research. The sociology major prepares students to rigorously analyze the social, political, and economic spheres of society at the local and global levels. Students will develop a holistic understanding of preventative and reactive responses to social inequality and an understanding of how to impact change at the individual and structural levels. The combined major provides students with the conceptual and practical tools to understand how various features of society affect its members as well as how people create social change.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Human Services Requirements

Code	Title	Hours
<b>Human Services Required Courses</b>		
HUSV 1101	Social Change and Human Services	4
HUSV 2300	Counseling in Human Services	4
HUSV 3570	The Nonprofit Sector, Philanthropy, and Social Change	4
HUSV 3900	Social Policy	4
HUSV 4994	Human Services Internship	6
<b>Human Services Electives</b>		
Complete three additional HUSV courses.		12
<b>Research Methods</b>		
Complete option A or option B:		4-8

### Option A

HUSV 2970	Research Methods for Human Services
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### Option B

SOCL 2321	Research Methods in Sociology
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and

Complete an additional HUSV Elective

### Senior Capstone <sup>1</sup>

HUSV 4700	Senior Seminar in Human Services	4
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<sup>1</sup> With permission of human services, the student may complete sociology capstone Senior Seminar (SOCL 4600) and substitute one advanced human services elective for Senior Seminar in Human Services (HUSV 4700).

### Sociology Requirements

Code	Title	Hours
<b>Required Sociology Courses</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 3300	Social Theory	4
<b>Introductory Electives</b>		
Complete two of the following:		8
SOCL 1120	Society and Health	
SOCL 1228	Social Problems	
SOCL 1241	Violence and Society	
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 1290	Juvenile Delinquency	
SOCL 1295	Drugs and Society	
ANTH 1101	Peoples and Cultures	
<b>Intermediate-Level Elective</b>		
Complete two of the following:		8
SOCL 2268	Social Movements	
SOCL 2270	Race and Ethnic Relations	
SOCL 2358	Current Issues in Cities and Suburbs	
ANTH 2302	Gender and Sexuality: A Cross-Cultural Perspective	
ANTH 2305	Global Markets and Local Culture	
ANTH 2315	Religion and Modernity	
SOCL 3441	Sociology of Health and Illness	
SOCL 3465	Globalization and the Evolution of Human Societies	
SOCL 3487	Applied Sociology: Practice and Theory	
<b>Advanced-Level Elective</b>		
Complete one of the following:		4
SOCL 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 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
ANTH 4580	Special Topics in Anthropology	
<b>Senior Seminar<sup>2</sup></b>		
SOCL 4600	Senior Seminar	4

<sup>2</sup> With permission of the sociology head adviser, the student may complete Senior Seminar in Human Services (HUSV 4700) and substitute one advanced sociology elective for Senior Seminar (SOCL 4600).

### Human Services/Sociology Integrative Course

Code	Title	Hours
HUSV 2355	Race, Identity, Social Change, and Empowerment	4

### Sociology Major Grade Requirement

A GPA of 2.000 for major courses is required.

### Human Services and Sociology Combined Major Credit Requirement

Complete 78 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

#### Four Years, No Co-op

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV 1101	4	MATH 1215	4	Vacation	0	Vacation	0
ENGW 1111	4	HUSV 2300	4				
SOCL 1101	4	SOCL Introductory Elective 2	4				
SOCL Introductory Elective 1	4	HSVC elective	4				
		16			16		
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
HUSV Elective	4	HUSV 2355	4	Vacation	0	Vacation	0
HUSV Elective	4	SOCL Intermediate Elective	4				
Elective	4	Elective	4				
Elective	4	Elective	4				
		16			16		
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
SOCL 2320	4	HUSV 2970 or SOCL 2321	4	Vacation	0	Vacation	0
SOCL 3300	4	Elective	4				

Elective	4	SOCL Intermediate-Level Elective	4				
HUSV 3570	4	ENGW 3315	4				
		16			16		
					0		
					0		

Year 4							
Fall	Hours	Spring	Hours				
HUSV 3900	4	HUSV 4700	4				
HUSV 4994	6	SOCL 4600	4				
Elective	4	Elective	4				
SOCL Advanced-Level Elective	4	Elective	4				
		18			16		

Total Hours: 130

## 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. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Linguistics Major Language Requirement

Complete two courses in the same language with a grade of C or higher. Proficiency at elementary level 2 or higher is required.

### Linguistics Requirements

Note: A grade of C or higher is required for all courses in this section.

Code	Title	Hours
<b>Linguistics Requirements</b>		
LING 1150	Introduction to Language and Linguistics	4

LING 2350	Linguistic Analysis	4
LING 3442	Sociolinguistics	4
LING 3456	Language and Gender	4

**Linguistic Structure**

Complete three of the following:		12
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3450	Syntax	
LING 3452	Semantics	

**Linguistics Elective**

Complete one of the following (not counted elsewhere):		4
DEAF 2700	ASL Linguistics	
LING 3420	Phonetics	
LING 3422	Phonology	
LING 3424	Morphology	
LING 3434	Bilingualism	
LING 3450	Syntax	
LING 3452	Semantics	
LING 3454	History of English	
LING 3458	Topics in Linguistics	
LING 3460	Historical Linguistics	
LING 4654	Seminar in Linguistics	
LING 4993	Independent Study	
PHIL 1115	Introduction to Logic	
PSYC 3464	Psychology of Language	
PSYC 4610	Laboratory in Psycholinguistics	
PSYC 4658	Seminar in Psycholinguistics	

**Linguistics Research**

Complete one of the following:		4
LING 4891	Research Seminar in Linguistics	
LING 4991	Directed Study Research	
LING 4970 and LING 4971	Junior/Senior Honors Project 1 and Junior/Senior Honors Project 2	

**Anthropology Requirements**

Code	Title	Hours
<b>Foundation Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
ANTH 4600	Senior Seminar	4

**Anthropology Advanced Area Courses**

Complete three of the following:		12
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Anthropology Electives**

Complete three ANTH courses not already taken.		12
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**Linguistics/Anthropology Integrative Requirement**

Code	Title	Hours
<b>Integrative Course</b>		
LING 3412	Language and Culture	4

**Anthropology Major Grade Requirement**

A GPA of 2.000 for major courses is required.

**Linguistics/Anthropology Combined Major Credit Requirement**

Complete 76 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Five Years, Three Co-ops in Summer 2/Fall**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation		Vacation	
ANTH 1101	4	ANTH 2305	4				
ENGW 1111	4	LING 3412	4				
MATH 1215	4	Foreign language course	4				
		16		16		0	

Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course		LING 3442	4	Vacation		Co-op	
Linguistic structure course	4	Linguistic structure course	4				
Anthropology elective	4	Anthropology elective	4				
Elective	4	Elective	4				
		16		16		0	

Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		LING 3456	4	Elective	4	Co-op	
		Linguistic structure course	4	Elective	4		
		Anthropology elective	4				
		Elective	4				
		0		16		8	

Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		Linguistics elective	4	Elective	4	Co-op	
		Anthropology advanced area course	4	Elective	4		

Anthropology advanced area course	4			
ENGW 3315	4			
0	16	8		0

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ANTH 4600	4
		Anthropology advanced area course	4
		Linguistics research	4
		Elective	4
0		16	

Total Hours: 128

**Four Years, No Co-op**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
LING 1150	4	LING 2350	4	Vacation		Vacation	
ANTH 1101	4	ANTH 2305	4				
ENGW 1111	4	LING 3412	4				
MATH 1215	4	Foreign language course	4				
16		16		0		0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Foreign language course	4	LING 3442	4	Vacation		Vacation	
Linguistic structure course	4	Linguistic structure course	4				
Anthropology elective	4	Anthropology elective	4				
Elective	4	Elective	4				
16		16		0		0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Anthropology elective	4	LING 3456	4	Vacation		Vacation	
Anthropology advanced area course	4	Linguistic structure elective	4				
Elective	4	Anthropology advanced area course	4				
ENGW 3315	4	Elective	4				
16		16		0		0	

**Year 4**

Fall	Hours	Spring	Hours
Linguistics research	4	ANTH 4600	4

Anthropology advanced area course	4	Linguistics elective	4
Elective	4	Elective	4
Elective	4	Elective	4
16		16	

Total Hours: 128

**Mathematics and Cultural Anthropology, BS**

In the BS combined mathematics and cultural anthropology degree program, anthropology and mathematics courses lay the groundwork for strong basic training that is designed to train the student to use mathematical models and methodologies for the study of problems in cultural anthropology.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

**NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (p. 42).

**Experiential Liberal Arts**

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

**Mathematics Requirements**

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 3001 to MATH 5999		

**Anthropology Requirements**

Code	Title	Hours
<b>Anthropology Required Courses</b>		
ANTH 1101	Peoples and Cultures	4

ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
ANTH 2305	Global Markets and Local Culture	4

**Anthropology Area Courses**

Complete two of the following. Additional area courses may count as anthropology electives: 8

ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	

**Anthropology Electives**

Complete three 4-semester-hour courses in addition to the requirements stated above. One study-abroad course may count toward this requirement with prior permission from the department. 12

ANTH 2000 to ANTH 4990

**Capstone Requirement**

ANTH 4600	Senior Seminar	4
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**Integrative Requirement**

**Code Title Hours**  
Complete one of the following: 4

MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

Complete the following: 4

ANTH 3120	Consumer Cultures	
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Total Hours 8

**Mathematics and Anthropology Combined-Major Credit Requirement**

Complete 80 semester hours in the major.

**Program Requirement**

128 total semester hours required

**Plan of Study**

**Year 1**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 1341	4	MATH 1342	4	Vacation		Vacation	
MATH 1365	4	Foreign language course		4			
ANTH 1101	4	ANTH 2305		4			
ENGW 1111	4	Elective		4			
		16			16		
					0		
						0	

**Year 2**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2321	4	ANTH elective		4	Vacation		Vacation
ANTH 3410	4	MATH 2331		4			
MATH 2341	4	Foreign language course		4			

ANTH elective	4	MATH 3081	4				
		16			16		
					0		
						0	

**Year 3**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		MATH elective		4	Elective		4
		Elective		4	Elective		4
		ANTH elective		4			
		ANTH advanced area course		4			
		0			16		
						8	
						0	

**Year 4**

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op		ANTH 3421		4	MATH elective		4
		MATH elective		4	Elective		4
		ANTH advanced area course		4			
		ANTH advanced area course		4			
		0			16		
						8	
						0	

**Year 5**

Fall	Hours	Spring	Hours
Co-op		ANTH 4600	4
		ANTH advanced area course	4
		Elective	4
		Integrative course	4
		0	16

Total Hours: 128

**Mathematics and Sociology, BS**

In the mathematics and sociology combined-major BS program, sociology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare students toward developing sociological models using mathematics.

**Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

**University-Wide Requirements**

All undergraduate students are required to complete the University-Wide Requirements (p. 46).



### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Mathematics Requirements

Code	Title	Hours
<b>Problem Solving</b>		
MATH 1365	Introduction to Mathematical Reasoning	4
<b>Calculus</b>		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
<b>Intermediate and Advanced Mathematics</b>		
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 2331	Linear Algebra	4
MATH 3081	Probability and Statistics	4
<b>Math Electives</b>		
Complete two courses in the following range that are not required in the requirements above:		8
MATH 30001 to MATH 5999		

### Sociology Requirements

Code	Title	Hours
<b>Sociology Required Courses</b>		
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
<b>Sociology Electives</b>		
Complete one course from each course range:		
<i>Introductory Elective</i>		4
SOCL 1101 to SOCL 1999		
<i>Intermediate Elective</i>		4
SOCL 2000 to SOCL 3999		
<i>Advanced Elective</i>		4
SOCL 4000 to SOCL 4999		
<b>Capstone Requirement</b>		
SOCL 4600	Senior Seminar	4

### Integrative Requirement

Code	Title	Hours
Complete one of the following:		
SOCL 1280	The Twenty-First-Century Workplace	4
SOCL 3485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
MATH 4025	Applied Mathematics Capstone	

MATH 5131 Introduction to Mathematical Methods and Modeling

### Mathematics and Sociology Combined Major Credit Requirement

Complete 68 semester hours in the major.

### Program Requirement

128 total semester hours required

### Plan of Study

Year 1										
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours			
MATH 1341	4	MATH 1342	4	Vacation		Vacation				
MATH 1365	4	SOCL 2320	4							
ANTH 1101	4	SOCL 3300	4							
ENGW 1111	4	Elective	4							
			16			16			0	
Year 2										
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours			
MATH 2321	4	MATH 2341	4	Vacation		Vacation				
ANTH 2305	4	Elective	4							
SOCL 2321	4	SOCL elective	4							
Elective	4	MATH elective	4							
			16			16			0	
Year 3										
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours			
MATH 2331	4	Co-op		Co-op		Vacation				
Elective	4									
SOCL elective	4									
MATH elective	4									
			16			0			0	
Year 4										
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours			
MATH 3081	4	Co-op		Co-op		Vacation				
SOCL elective	4									
Elective	4									
Elective	4									
			16			0			0	
Year 5										
Fall	Hours	Spring	Hours							
Elective	4	Elective	4							
Elective	4	Elective	4							
Elective	4	Capstone	4							
Elective	4	Integrative course	4							
			16			16				

Total Hours: 128

## Sociology and Cultural Anthropology, BS

The sociology/anthropology department at Northeastern University offers a combined major in sociology and anthropology. Students learn the disciplinary histories, practices, and methods of sociology and sociocultural anthropology, identify foundational and contemporary debates within and across these two disciplines, and evaluate their contributions to our understanding of local and global societies and cultures. The combined major offers students various opportunities for community engagement, experiential learning, and for gaining research skills using quantitative and qualitative methods.

### Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

### University-Wide Requirements

All undergraduate students are required to complete the University-Wide Requirements (p. 46).

### NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (p. 42).

### Experiential Liberal Arts

All undergraduate students in the College of Social Sciences and Humanities are required to complete the Experiential Liberal Arts Requirement (p. 757).

### Sociology Major Requirements

Code	Title	Hours
<b>Required Sociology</b>		
SOCL 1101	Introduction to Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
<b>Sociology Electives</b>		
<i>Introductory Electives</i>		
Complete two courses in the following range:		8
SOCL 1110 to SOCL 1999		
<i>Intermediate Elective</i>		
Complete one course in the following range:		4
SOCL 2000 to SOCL 3999		
<i>Advanced Elective</i>		
Complete one course in the following range:		4
SOCL 4000 to SOCL 4999		
<b>Experiential Learning</b>		
Complete one of the following courses, or complete a study abroad or a dialogue of civilizations:		4
SOCL 3487	Applied Sociology: Practice and Theory	
COOP 3945	Co-op Work Experience	
SOCL 4971	Junior/Senior Honors Project 2	

### Anthropology Major Requirements

Code	Title	Hours
<b>Cultural Anthropology Core Courses</b>		
ANTH 1101	Peoples and Cultures	4
ANTH 3410	Ethnographic Field Experience	4
ANTH 3421	Foundations of Anthropological Theory	4
<b>Advanced Area Courses</b>		
Complete two of the following:		8
ANTH 4350	Ethnography of Southeast Asia	
ANTH 4500	Latin American Society and Development	
ANTH 4505	Native North Americans	
ANTH 4510	Anthropology of Africa	
ANTH 4515	Culture and Politics in Modern India	
<b>Anthropology Electives</b>		
Complete four ANTH courses. One study-abroad course may also count toward this requirement with prior permission from the department.		16

### Integrative Requirement

Students must choose between a one-semester senior project, which they would complete in the context of Senior Seminar (ANTH 4600) or Senior Seminar (SOCL 4600), or a two-semester senior thesis, which would require them to also enroll in a fall-semester directed study.

Code	Title	Hours
<b>Required Course</b>		
ANTH 2305	Global Markets and Local Culture	4
<b>Capstone</b>		
SOCL 4600 or ANTH 4600	Senior Seminar	4

### Sociology and Cultural Anthropology Major Grade Requirement

A GPA average of 2.000 across all major courses is required.

### Sociology and Cultural Anthropology Combined Major Credit Requirement

Complete 76 semester hours in the major.

### Program Requirement

128 total semester hours required

## Cultural Anthropology, Minor

The cultural anthropology minor at Northeastern focuses on the study of culture as it is located in issues of race, ethnicity, class, gender, history, and globalization. Students develop proficiencies in widely applicable skills and frameworks, such as cultural relativism, comparative analysis, cross-cultural communication, research design, and ethnographic field research. Students have the opportunity to work with faculty members with regional expertise in Latin America, Europe, Asia, Africa, and North America and who teach courses on contemporary issues such as globalization, digital technologies, consumerism, sports, gender and sexuality, tourism, and social movements. This minor can complement a wide range of majors throughout the university, providing students with regional expertise and a depth of cultural understanding.

## Minor Requirements

Students minoring in Cultural Anthropology must complete Peoples and Cultures (ANTH 1101), plus any three ANTH electives, at least one of which must be at the 3000 level or above.

## Required Courses

Code	Title	Hours
ANTH 1101	Peoples and Cultures	4

## Anthropology Electives

Code	Title	Hours
Complete three ANTH electives, one of which must be at the 3000 level or above.		12

## GPA Requirement

2.000 GPA required in the minor

## Science and Technology Studies, Minor

The science and technology studies (STS) minor offers an interdisciplinary program of study focused on the critical role of science and technology in contemporary societies. Rather than viewing science and technology as autonomous or self-generating domains, STS traces the complex interplay that exists between science and technology and the social, political, and cultural contexts in which they are formed. Combining coursework in such fields as sociology, history, philosophy, engineering, and the humanities, the STS program offers students an opportunity to obtain a deeper understanding of the norms, values, and beliefs that often lie hidden within scientific knowledge and engineering designs. In this way, the program is designed to equip students to anticipate and address the many ethical and policy dilemmas that scientific and engineering knowledge provoke, especially as these bear on health, the environment, and community life around the world.

The STS minor is relevant for students embarking on STEM careers as well as those majoring in social science or humanities fields. The curriculum is flexible, enabling students to customize their studies in accordance with their individual interests.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Required Course

Code	Title	Hours
SOCL 3485 or HIST 2220	Environment, Technology, and Society History of Technology	4

## STS Electives

Code	Title	Hours
<b>Foundational Requirement</b>		

Complete one 1000–2000-level course from the following: 4

CIVE 1200	How Cities Work: Experiencing Urban Infrastructure	
ENVR 1104	Natural Disasters and Catastrophes	
HIST 1225	Gender, Race, and Medicine	
HIST 2233	The History of Medicine in North America	
PHIL 1145	Technology and Human Values	

PHIL 2050	Information and Uncertainty	
POLS 2390	Science, Technology, and Public Policy	
SOCL 1280	The Twenty-First-Century Workplace	
WMNS 2505	Digital Feminisms	
<b>Advanced Electives</b>		
Complete two of the following:		8
ANTH 3418	Wired/Unwired: Cybercultures and Technopolitics	
ENGL 3340	Technologies of Text	
PHIL 4510	Philosophy of Science	
PPUA 5264	Energy Democracy and Climate Resilience: Technology, Policy, and Social Change	
SOCL 4528	Computers and Society	

## GPA Requirement

2.000 GPA required in the minor

## Sociology, Minor

The sociology minor at Northeastern helps students to understand how to apply empirical evidence to address a wide range of social problems. Sociology minors can take courses in quantitative and qualitative research methods and theoretical and empirical reasoning. Elective courses draw on our faculty's expertise in violence, family life, health and illness, the environment, technology, gender and sexuality, occupations and professions, social movements, the law, and social inequality. This minor can complement a wide range of majors throughout the university, providing students with a range of skills to better understand their place in complex social environments.

## Minor Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified.

## Introduction to Sociology

Code	Title	Hours
SOCL 1101	Introduction to Sociology	4

## Electives

Code	Title	Hours
Complete three SOCL courses, at least one course must be from the 3000 level or above.		12

## GPA Requirement

2.000 GPA required in the minor

## Accelerated Bachelor/Graduate Degree Programs

The College of Social Sciences and Humanities offers a number of bachelor's/graduate degree programs that allow students to accelerate the attainment of the graduate degree by applying graduate credits taken as an undergraduate toward both the undergraduate and graduate degrees. Degrees are earned sequentially, with the bachelor's degree attainment followed by coursework to complete the graduate degree. See additional information on accelerated bachelor/graduate degree programs (<https://registrar.northeastern.edu/article/plusone-program-accelerated-bachelorgraduate-degree-programs/>).

## University Faculty

### Anis Abdulle

Assistant Cooperative Education Coordinator, Computer Sciences; Northeastern University, BA

### Mehdi Abedi

Assistant Teaching Professor, Mechanical and Industrial Engineering; Northeastern University, PhD

### Margot Abels

Assistant Teaching Professor, Women's, Gender, and Sexuality Studies and Human Services; Northeastern University, PhD

### Emad Aboelela

Associate Teaching Professor, Electrical and Computer Engineering; University of Miami, PhD

### Max Abrahms

Associate Professor, Political Science; University of California, Los Angeles, PhD

### Ali Abur

Professor, Electrical and Computer Engineering; Ohio State University, PhD

### Daniel Adams

Associate Professor, Architecture; Harvard University, MArch

### Libby Adler

Professor, Law and Women's, Gender, and Sexuality Studies; Northeastern University, JD

### Laura Adrien

Assistant Cooperative Education Coordinator, College of Engineering; University of Massachusetts, Boston, MA

### Jeffrey Agar

Associate Professor, Chemistry and Chemical Biology and Pharmaceutical Sciences; University of Georgia, PhD

### Rajesh Aggarwal

Professor, Finance; Harvard University, PhD

### Christina Agostinelli-Fucile

Assistant Teaching Professor, World Languages Center; State University of New York, Buffalo, PhD

### Ruth Aguilera

Darla and Frederick Brodsky Trustee Professor in Global Business, International Business and Strategy; Harvard University, PhD

### Michael Ahern

Assistant Cooperative Education Coordinator, College of Engineering; Salem State University, MEd

### Amal Ahmed

Associate Professor, Computer Sciences; Princeton University, PhD

### Aziza Ahmed

Professor, Law; University of California, Berkeley, JD

### Jaehan Ahn

Assistant Professor, Accounting; University of Oklahoma, PhD

### Laurel Ahnert

Visiting Lecturer, Media and Screen Studies; Georgia State University, PhD

### Sophia Ainslie

Associate Teaching Professor, Art + Design; School of the Museum of Fine Arts/Tufts University, MFA

### Zeynep Aksehirli

Associate Teaching Professor, Management and Organizational Development; University of California, Los Angeles, PhD

### Mohammad Alam

Professor, Economics; University of Western Ontario (Canada), PhD

### Noor E. Alam

Assistant Professor, Mechanical and Industrial Engineering; University of Alberta (Canada), PhD

### Brian Albrecht

Associate Cooperative Education Coordinator, College of Engineering; Carnegie Mellon University, MS

### Daniel Aldrich

Professor, Political Science and Public Policy and Urban Affairs; Harvard University, PhD

### Todd M. Alessandri

Associate Professor, International Business and Strategy; University of North Carolina, Chapel Hill, PhD

### Jacques Alexis

Assistant Teaching Professor, College of Professional Studies; University of Maryland, PhD

### Nicole Aljoe

Associate Professor, English and Cultures, Societies, and Global Studies; Tufts University, PhD

### Kristen Allison

Assistant Professor, Communication Sciences and Disorders; University of Wisconsin, Madison, PhD

### Michael Allshouse

Assistant Professor, Mechanical and Industrial Engineering; Massachusetts Institute of Technology, PhD

### Meryl Alper

Assistant Professor, Communication Studies; University of Southern California, PhD

### Shannon Alpert

Assistant Teaching Professor, College of Professional Studies; University of North Carolina, Charlotte, PhD

### Akram N. Alshawabkeh

University Distinguished Professor, George A. Snell Professor of Engineering, Civil and Environmental Engineering; Louisiana State University, PhD

### Sari Altschuler

Associate Professor, English; City University of New York, PhD

### Ismet B. Altunkaynak

Assistant Teaching Professor, Physics; Northeastern University, PhD

**Christopher Amato**

Assistant Professor, Computer Sciences; University of Massachusetts, Amherst, PhD

**Steven Amato**

Teaching Professor, College of Professional Studies; Boston College, PhD

**Jane Amidon**

Professor, Architecture; Harvard University, MLA

**Mansoor M. Amiji**

University Distinguished Professor, Pharmaceutical Sciences and Chemical Engineering; Purdue University, PhD

**Rouzbeh Amini**

Associate Professor, Mechanical and Industrial Engineering and Bioengineering; University of Minnesota, PhD

**Mahshid Amirabadi**

Assistant Professor, Electrical and Computer Engineering; Texas AM University, PhD

**Ghita Amor-Tijani**

Lecturer, Computer Sciences; George Washington University, PhD

**Teiichi Ando**

Professor, Mechanical and Industrial Engineering; Colorado School of Mines, PhD

**Jonathan Andrew**

Associate Cooperative Education Coordinator, College of Social Sciences and Humanities; SIT Graduate Institute, MA

**Edwin C. Andrews**

Associate Professor, Art + Design; Indiana University, MFA

**Nieves Angel**

Professor, Cultures, Societies, and Global Studies and History; Cornell University, PhD

**Jose Annunziato**

Assistant Teaching Professor, Computer Sciences; University of Massachusetts, Amherst, PhD

**Javier Apfeld**

Assistant Professor, Biology; University of California, San Francisco, PhD

**Tsugna Aramaki**

Assistant Professor, Physics; Columbia University, PhD

**Michael Arnold Mages**

Assistant Professor, Art + Design; Carnegie Mellon University, PhD

**Cheryl Arruda**

Associate Cooperative Education Coordinator, College of Engineering; Northeastern University, MEd

**Katherine Ashley**

Associate Teaching Professor, Supply Chain and Information Management; University of California, Berkeley, PhD

**Lori Ashline**

Assistant Teaching Professor, College of Professional Studies; Western New England University, JD

**Javed A. Aslam**

Professor, Computer Sciences; Massachusetts Institute of Technology, PhD

**Anand Asthagiri**

Associate Professor, Bioengineering; Massachusetts Institute of Technology, PhD

**Jared R. Auclair**

Associate Teaching Professor, Biotechnology; University of Massachusetts, PhD

**Debra Auguste**

Professor, Chemical Engineering; Princeton University, PhD

**Earlene Avalon**

Assistant Teaching Professor, College of Professional Studies; Simmons College, PhD

**Emily Avery-Miller**

Assistant Teaching Professor, English; Emerson College, MFA

**Hava Avraham**

Research Assistant Professor, Center for Drug Discovery; Hebrew University of Jerusalem (Israel), PhD

**Joseph L. Ayers**

Professor, Marine and Environmental Sciences; University of California, Santa Cruz, PhD

**Nathaniel D. Bade**

Assistant Teaching Professor, Mathematics; Northeastern University, PhD

**Keith Bagley**

Associate Clinical Professor, Computer Sciences; University of Massachusetts, Lowell, PhD

**Jianqui Bai**

Assistant Professor and Gary Gregg Faculty Fellow, Finance; University of Southern California, PhD

**Rekha Bai**

Assistant Teaching Professor, Mathematics; University of Iowa, PhD

**Ruobing Bai**

Assistant Professor, Mechanical and Industrial Engineering; Harvard University, PhD

**Moya Bailey**

Assistant Professor, Cultures, Societies, and Global Studies and Women's, Gender, and Sexuality Studies; Emory University, PhD

**Richard H. Bailey**

Professor, Marine and Environmental Sciences; University of North Carolina, Chapel Hill, PhD

**Ambika Bajpayee**

Assistant Professor, Bioengineering; Massachusetts Institute of Technology, PhD

**Allison K. Baker**

Assistant Teaching Professor, Psychology; Northeastern University, PhD

**Brook K. Baker**

Professor, Law; Northeastern University, JD

**Shalanda H. Baker**

Professor, Law and Public Policy and Urban Affairs; Northeastern University, JD

**Ilter Bakkal**

Assistant Teaching Professor, Economics; Northern Illinois University, PhD

**Charles Bame-Aldred**

Associate Academic Specialist, Accounting; University of Massachusetts, Amherst, PhD

**Benita Bamgbade**

Assistant Professor, Pharmacy and Health Systems Sciences; University of Texas, Austin, PhD

**Elitsa Banalieva**

Associate Professor, International Business and Strategy; Indiana University, PhD

**Debra Bangs**

Assistant Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Massachusetts General Hospital Institute of Health Professions, DPT

**Arun Bansil**

University Distinguished Professor, Physics; Harvard University, PhD

**Albert-Laszlo Barabasi**

Robert Gray Dodge Professor and University Distinguished Professor, Physics and Computer Sciences; Boston University, PhD

**Emanuela Barberis**

Professor, Physics; University of California, Santa Cruz, PhD

**Sumner Barenberg**

Professor of the Practice, Bioengineering; Case Western Reserve University, PhD

**Cynthia Baron**

Associate Academic Specialist, College of Professional Studies; Northeastern University, MBA

**Timothy Barr**

Postdoctoral Teaching Associate, Communication Studies; University of Pittsburgh, PhD

**Amilcar Barreto**

Professor, Cultures, Societies, and Global Studies and International Affairs; State University of New York, Buffalo, PhD

**Lisa Barrett**

University Distinguished Professor, Psychology; University of Waterloo (Canada), PhD

**Margarita Barrios Ponce**

Assistant Teaching Professor, Art + Design; Yale University, MFA

**Ignacio A. Barros Reyes**

Zelevinsky Research Instructor, Mathematics; Humboldt Universität zu Berlin (Germany), PhD

**Carey Barry**

Assistant Clinical Professor, Physician Assistant Program; Quinnipiac University, MS

**Yakov Bart**

Associate Professor and Thomas E. Moore Faculty Fellow, Marketing; University of California, Berkeley, PhD

**Stefano Basagni**

Associate Professor, Electrical and Computer Engineering; University of Texas, Dallas, PhD

**Marla Baskerville**

Associate Professor, Management and Organizational Development; Tulane University, PhD

**John Basl**

Associate Professor, Philosophy and Religion; University of Wisconsin, Madison, PhD

**Maureen Basmajian**

Senior Cooperative Education Coordinator, D'Amore-McKim School of Business; Boston College, MBA

**Linnea Basu**

Associate Cooperative Education Coordinator, College of Social Sciences and Humanities; Northeastern University, MS

**Oleg Batishchev**

Professor of the Practice, Physics; Moscow Institute of Physics and Technology (Russia), PhD

**Allison Bauer**

Associate Teaching Professor, Health Sciences; University of Pennsylvania, PhD

**Christopher E. Beasley**

Associate Professor, Mathematics; Princeton University, PhD

**Nicholas Beauchamp**

Assistant Professor, Political Science; New York University, PhD

**Michael Beaudet**

Professor of the Practice, Journalism; Northeastern University, MA

**Laura Beerits**

Assistant Teaching Professor, English; University of Texas, Austin, PhD

**Gail S. Begley**

Teaching Professor, Biology; Boston University, PhD

**Mehdi Behroozi**

Assistant Professor, Mechanical and Industrial Engineering; University of Minnesota, PhD

**Edward Beighley**

Associate Professor, Civil and Environmental Engineering; University of Maryland, PhD

**Leo Beletsky**

Professor, Law and Health Sciences; Temple University School of Law, JD

**Jonathan Bell**

Assistant Professor, Computer Sciences; Columbia University, PhD

**Chiara Bellini**

Assistant Professor, Bioengineering; University of Calgary (Canada), PhD

**Kylie Bemis**

Lecturer, Computer Sciences; Purdue University, PhD

**Sidi Bencherif**

Assistant Professor, Chemical Engineering; Carnegie Mellon University, PhD



**Jonathan Benda**

Associate Teaching Professor, Writing Program; Syracuse University, PhD

**Elisabeth Bennett**

Associate Teaching Professor, College of Professional Studies; University of Georgia, PhD

**James C. Benneyan**

Professor, Mechanical and Industrial Engineering; University of Massachusetts, Amherst, PhD

**Iris Berent**

Professor, Psychology; University of Pittsburgh, PhD

**Dionisio Bernal**

Professor, Civil and Environmental Engineering; University of Tennessee, PhD

**Elena Bernal Mor**

Assistant Teaching Professor, Electrical and Computer Engineering; Universitat Politècnica de València (Spain), PhD

**Eugene A. Bernstein**

Associate Teaching Professor, Pharmaceutical Sciences; Ivanovo Medical Institute (Russia), PhD

**Michael Bessette**

Assistant Clinical Professor, Physician Assistant Program; Sackler School of Medicine, PhD

**Craig T. Bettinson**

Director of Cooperative Education, College of Arts, Media and Design; Northeastern University, MEd

**Penny Beuning**

Professor, Chemistry and Chemical Biology; University of Minnesota, PhD

**Peter J. Bex**

Professor, Psychology; Cardiff University (United Kingdom), PhD

**Rahul Bhargava**

Assistant Professor, Journalism and Art + Design; Massachusetts Institute of Technology, MA

**Shawn Bhimani**

Assistant Professor, Supply Chain and Information Management; Duke University, PhD

**Dapeng Bi**

Assistant Professor, Physics; Brandeis University, PhD

**Timothy Bickmore**

Professor, Computer Sciences; Massachusetts Institute of Technology, PhD

**Doug Bielmeier**

Associate Teaching Professor, Music; Argosy University, PhD

**Priyanka Bishnoi**

Assistant Cooperative Education Coordinator, Khoury College of Computer Sciences; University of Southern California, MS

**Scott Bishop**

Professor of the Practice, Architecture; University of Pennsylvania, MArch

**Nathan Blake**

Associate Teaching Professor, Media and Screen Studies; University of California, PhD

**Samuel J. Blank**

Professor, Mathematics; Brandeis University, PhD

**Robert J. Blaser**

Associate Cooperative Education Coordinator, Pharmacy and Health Systems Sciences; Massachusetts College of Pharmacy, MS

**Jonathan Blazek**

Assistant Professor, Physics; University of California, Berkeley, PhD

**John Bleakney**

Assistant Cooperative Education Coordinator, Graduate School of Engineering; State University of New York, Albany, MA

**Francis Blessington**

Professor, English; Brown University, PhD

**Aaron Block**

Associate Teaching Professor, English; Emerson College, MFA

**Elizabeth M. Bloom**

Teaching Professor, Law; Georgetown University, JD

**Linda Blum**

Professor, Sociology and Anthropology; University of California, Berkeley, PhD

**Rhonda M. Board**

Associate Professor, Nursing; Ohio State University, PhD

**Janet Bobcean**

Associate Professor, Theatre; Ohio University, MFA

**Erika Boeckeler**

Associate Professor, English; Harvard University, PhD

**Samantha Boehm**

Assistant Teaching Professor, Theatre; Brandeis University, MA

**Charles Bognanni**

Senior Cooperative Education Coordinator, D'Amore-McKim School of Business; Northeastern University, MEd

**Christopher Bolick**

Assistant Academic Specialist, College of Professional Studies; Western Carolina University, MS

**Tamara Bonaci**

Lecturer, Computer Sciences; University of Washington, PhD

**Lorraine A. Book**

Assistant Clinical Professor, Communication Sciences and Disorders; Florida State University, PhD

**Raymond G. Booth**

Professor, Pharmaceutical Sciences and Chemistry and Chemical Biology; University of California, San Francisco, PhD

**Monica Borgida**

Assistant Teaching Professor, College of Professional Studies; University of Pisa and Bologna (Italy), PhD

**Skylar Borgstrom**

Postgraduate Teaching Fellow, Art + Design; State University of New York, Buffalo, MA

**Michelle Borkin**

Assistant Professor, Computer Sciences; Harvard University, PhD

**Natalie Bormann**

Teaching Professor, Political Science; University of Newcastle upon Tyne (United Kingdom), PhD

**Jeffery A. Born**

Professor, Finance; University of North Carolina, Chapel Hill, PhD

**Christopher Bosso**

Professor, Public Policy and Urban Affairs; University of Pittsburgh, PhD

**Ekaterina Botchkovar**

Associate Professor, Criminology and Criminal Justice; North Carolina State University, PhD

**Kevin Boudreau**

Associate Professor, Entrepreneurship and Innovation; Massachusetts Institute of Technology, PhD

**Alma Bournazian**

Associate Academic Specialist, American Sign Language; Western Maryland College, MS

**Stacey Bourns**

Professor, World Languages Center; University of Texas, Austin, PhD

**Carla Bouwmeester**

Associate Clinical Professor, Pharmacy and Health Systems Sciences; Massachusetts College of Pharmacy, PharmD

**Jennifer L. Bowen**

Associate Professor, Marine and Environmental Sciences; Boston University, PhD

**James Boyer**

Assistant Academic Specialist, Accounting; Northeastern University, MBA

**Nicole M. Boyson**

Professor, Finance; Ohio State University, PhD

**David Brady**

Teaching Professor, Electrical and Computer Engineering; Princeton University, PhD

**Anthony Braga**

Distinguished Professor, Criminology and Criminal Justice; Rutgers University, PhD

**Ontonye Braide-Moncoeur**

Associate Teaching Professor, Chemistry and Chemical Biology; University of Florida, PhD

**Steven Braun**

Visiting Assistant Professor, Art + Design; Yale University, MS

**Maxim Braverman**

Professor, Mathematics; Tel Aviv University (Israel), PhD

**Heather C. Brenhouse**

Associate Professor, Psychology; Northeastern University, PhD

**Becky A. Briesacher**

Associate Professor, Pharmacy and Health Systems Sciences; University of Maryland, Baltimore, PhD

**Amy M. Briesch**

Associate Professor, Applied Psychology; University of Connecticut, PhD

**Elizabeth Britt**

Professor, English; Rensselaer Polytechnic Institute, PhD

**Kevin Broadbelt**

Associate Teaching Professor, Biotechnology; City University of New York, PhD

**Mary E. Bronski**

Assistant Clinical Professor, Nursing; Northeastern University, PhD

**Dana H. Brooks**

Research Professor, Electrical and Computer Engineering; Northeastern University, PhD

**Cammy Brothers**

Associate Professor, Architecture and Art + Design; Harvard University, PhD

**Colin Brown**

Assistant Teaching Professor, Political Science; Harvard University, PhD

**Nicholas Brown**

Assistant Teaching Professor, Graduate School of Engineering; University of California, Los Angeles, PhD

**Nicholas Brown**

Associate Teaching Professor, Architecture and History; University of Illinois, Urbana-Champaign, PhD

**Philip M. Brown**

University Distinguished Professor, Sociology and Anthropology and Health Sciences; Brandeis University, PhD

**Timothy Brown**

Professor, History; University of California, Berkeley, PhD

**Todd A. Brown**

Clinical Instructor, Pharmacy and Health Systems Sciences; Northeastern University, MHP

**Maria Brucato**

Assistant Teaching Professor, World Languages Center; University of Texas, PhD

**Rodney Brunson**

Thomas P. O'Neill Jr. Chair of Public Life, Criminology and Criminal Justice and Political Science; University of Illinois, Chicago, PhD

**Elizabeth Bucar**

Professor, Philosophy and Religion; University of Chicago, PhD

**David E. Budil**

Associate Professor, Chemistry and Chemical Biology; University of Chicago, PhD

**Jamie G. Bunce**

Assistant Teaching Professor, Behavioral Neuroscience; University of Connecticut, PhD

**Lucy Bunning**

Associate Teaching Professor, College of Professional Studies; Lesley University, PhD

**Jeffrey Burds**

Associate Professor, History; Yale University, PhD

**Cheryl A. Burke**

Assistant Clinical Professor, Nursing; Massachusetts General Hospital  
Institute of Health Professions, PhD

**Lynn H. Burke**

Senior Cooperative Education Coordinator, College of Arts, Media and  
Design; University of Massachusetts, Amherst, MEd

**Margaret A. Burnham**

University Distinguished Professor, Law; University of Pennsylvania, LLB

**Jose Buscaglia**

Professor, Cultures, Societies, and Global Studies; University of Buffalo,  
PhD

**Jeremy Bushnell**

Associate Teaching Professor, Writing Program; University of Arizona,  
Tucson, MFA

**Ahmed A. Busnaina**

University Distinguished Professor, William Lincoln Smith Professor  
of Mechanical Engineering, Mechanical and Industrial Engineering;  
Oklahoma State University, PhD

**Bobette Buster**

Professor of the Practice, Journalism; Northwestern University, MFA

**Michael Butera**

Clinical Instructor, Nursing; Northeastern University, MS

**Qinghong Cai**

Associate Teaching Professor, World Languages Center; University of  
Kansas, MS

**Victoria Cain**

Associate Professor, History; Columbia University, PhD

**Paula Caligiuri**

Distinguished Professor of Global Leadership, International Business and  
Strategy; Pennsylvania State University, PhD

**Lisa M. Campagnoni**

Associate Cooperative Education Coordinator, College of Science;  
Northeastern University, MA

**James Campasano**

Assistant Teaching Professor, Finance; University of Massachusetts,  
Amherst, PhD

**Octavia Camps**

Professor, Electrical and Computer Engineering; University of Washington,  
PhD

**Yanet Canavan**

Associate Academic Specialist, World Languages Center; Salem State  
College, MA

**Kristopher Cannon**

Associate Teaching Professor, Media and Screen Studies; Georgia State  
University, PhD

**Mira Cantor**

Professor, Art + Design; University of Illinois, Urbana-Champaign, MFA

**Justin Caouette**

Visiting Lecturer, Philosophy and Religion; University of Calgary (Canada),  
PhD

**Luca Caracoglia**

Associate Professor, Civil and Environmental Engineering; University of  
Trieste (Italy), PhD

**Benjamin Caras**

Lecturer, Art + Design; University of Massachusetts, Amherst, MFA

**Peter Cardillo**

Assistant Cooperative Education Coordinator, Graduate School of  
Engineering; Boston College, MS

**Alexa A. Carlson**

Associate Clinical Professor, Pharmacy and Health Systems Sciences;  
Butler University, PharmD

**Mary Carney**

Associate Cooperative Education Coordinator, Bouvé College of Health  
Sciences; Boston College, MSN

**Heather Carpenter-Oliveira**

Associate Cooperative Education Coordinator, College of Engineering;  
Northeastern University, MS

**Jonathan Carr**

Associate Teaching Professor, Theatre; Columbia University, MFA

**Michelle Carr**

Senior Lecturer, Communication Studies; Kingston University (United  
Kingdom), MA

**Sara Carr**

Assistant Professor, Architecture; University of California, Berkeley, PhD

**Rebecca L. Carrier**

Professor, Chemical Engineering; Massachusetts Institute of Technology,  
PhD

**Matthew Carroll**

Professor of the Practice, Journalism; Northeastern University, BS

**Patricia Case**

Assistant Teaching Professor, Health Sciences; Harvard University, PhD

**Cristian Cassella**

Assistant Professor, Electrical and Computer Engineering; Carnegie  
Mellon University, PhD

**N. Fadeke Castor**

Assistant Professor, Philosophy and Religion and African and African-  
American Studies; University of Chicago, PhD

**Smajl Cenjic**

Assistant Cooperative Education Coordinator, Khoury College of  
Computer Sciences; Cambridge College, MA

**Jana Cephas**

Assistant Professor, Architecture; Harvard University, PhD

**Robert J. Cersosimo**

Associate Professor, Pharmacy and Health Systems Sciences; University  
of Utah, PharmD

**Christopher Cesario**

Assistant Clinical Professor, Physical Therapy, Movement, and  
Rehabilitation Sciences; Northeastern University, DPT

**Yunrong Chai**

Associate Professor, Biology; Cornell University, PhD

**Paul M. Champion**

Professor, Physics; University of Illinois, Urbana-Champaign, PhD

**Chee Chan**

Associate Academic Specialist, Marketing; Michigan State University, PhD

**Katherine Chan**

Assistant Teaching Professor, Music; University of Minnesota, PhD

**Raman Chandrasekar**

Clinical Professor, Computer Sciences; Tata Institute of Fundamental Research/University of Bombay (India), PhD

**Chiu Chang**

Associate Teaching Professor, Marketing; Indiana University, PhD

**Hsiang Chang**

Zelevinsky Research Instructor, Mathematics; Northwestern University, PhD

**Changyan Chen**

Research Professor, Center for Drug Discovery; Columbia University, PhD

**Qin Chen**

Professor, Civil and Environmental Engineering and Marine and Environmental Sciences; Old Dominion University, PhD

**Esther Chewning**

Senior Cooperative Education Coordinator, D'Amore-McKim School of Business; Suffolk University, MS

**Cherese Childers-McKee**

Assistant Teaching Professor, College of Professional Studies; University of North Carolina, Greensboro, PhD

**W. Paul Chiou**

Assistant Teaching Professor, Finance; Rutgers University, PhD

**David R. Hoffnes**

Assistant Professor, Computer Sciences; Northwestern University, PhD

**Chun-An Chou**

Assistant Professor, Mechanical and Industrial Engineering; Rutgers University, PhD

**Kaushik Roy Chowdhury**

Associate Professor, Electrical and Computer Engineering; University of Cincinnati, MS

**Ken Y. Chung**

Assistant Teaching Professor, Chemistry and Chemical Biology; Michigan State University, PhD

**Myojung Chung**

Assistant Professor, Journalism; Syracuse University, PhD

**Samuel Chung**

Assistant Professor, Bioengineering; Harvard University, PhD

**Hillary Chute**

Distinguished Professor, English and Art + Design; Rutgers University, PhD

**Dawn M. Cisewski**

Associate Teaching Professor, Psychology; Indiana University of Pennsylvania, PsyD

**Paolo Ciuccarelli**

Professor, Art + Design; Politecnico de Milano (Italy), MARCH

**Bruce H. Clark**

Associate Professor, Marketing; Stanford University, PhD

**Edmund L. Clark**

Associate Academic Specialist, Entrepreneurship and Innovation; Clark University, MBA

**Elisha Clark**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Boston University, MBA

**Heather Clark**

Professor, Bioengineering and Chemistry and Chemical Biology; University of Michigan, PhD

**Stephen B. Clark**

Assistant Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, DPT

**Paul Closas**

Assistant Professor, Electrical and Computer Engineering; Universitat Politècnica de Catalunya (Spain), PhD

**Emily Clough**

Assistant Professor, Political Science and International Affairs; Harvard University, PhD

**Robin Coddling**

Associate Professor, Applied Psychology; Syracuse University, PhD

**Mauricio Codesso**

Visiting Professor, Accounting; University of Santa Catarina (Brazil), PhD

**John D. Coley**

Associate Professor, Psychology; University of Michigan, PhD

**Greg Collier**

Professor of the Practice, Entrepreneurship and Innovation; Eastern Michigan University, MBA

**Randall C. Colvin**

Associate Professor, Psychology; University of Illinois, Urbana-Champaign, PhD

**Sally Conant**

Associate Cooperative Education Coordinator, College of Engineering; Salve Regina University, MA

**Michael Conley**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; Northeastern University, PharmD

**Richard Conley**

Associate Cooperative Education Coordinator, College of Social Sciences and Humanities; Boston University, JD

**Kelly Conn**

Associate Teaching Professor, College of Professional Studies; Boston University, PhD

**Thomas Consi**

Teaching Professor, Electrical and Computer Engineering; Columbia University, PhD

**Adam I. Cooper**

Associate Teaching Professor, Linguistics; Cornell University, PhD

**Seth Cooper**

Assistant Professor, Computer Sciences; University of Washington, PhD

**Gene D. Cooperman**

Professor, Computer Sciences; Brown University, PhD

**Ryan Cordell**

Associate Professor, English; University of Virginia, PhD

**Marie B. Corkery**

Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, DPT

**Patricia Corrigan**

Assistant Cooperative Education Coordinator, College of Science; Suffolk University, MA

**Felipe Cortes**

Assistant Professor, Finance; Washington University, St. Louis, PhD

**Ahmet Coskun**

Associate Teaching Professor, Mechanical and Industrial Engineering; Middle East Technical University (Turkey), PhD

**Xavier Costa**

Professor, Architecture; University of Pennsylvania, PhD

**Hugh G. Courtney**

Professor, International Business and Strategy; Massachusetts Institute of Technology, PhD

**Arthur J. Coury**

University Distinguished Professor, Chemical Engineering; University of Minnesota, PhD

**Erin J. Cram**

Professor, Biology; University of California, Berkeley, PhD

**Frederick Crane**

Senior Academic Specialist, Entrepreneurship and Innovation; Bradford University, PhD

**Justin D. Crane**

Assistant Professor, Biology; McMaster University (Canada), PhD

**Fiona Creed**

Associate Teaching Professor, College of Professional Studies; University College, Cork (United Kingdom), PhD

**William F. Crittenden**

Professor, International Business and Strategy; University of Arkansas, PhD

**Wendy Crocker**

Associate Teaching Professor, College of Professional Studies; University of Western Ontario (Canada), PhD

**Maia Cross**

Associate Professor, Political Science and International Affairs; Princeton University, PhD

**Robert Cross**

Assistant Teaching Professor, History; Princeton University, PhD

**Pedro Miguel Cruz**

Assistant Professor, Art + Design; Universidade de Coimbra (Portugal), PhD

**Daniel Cuenca**

Assistant Academic Specialist, World Languages Center; Boston College, MA

**Alvaro Cuervo-Cazurra**

Professor and Lloyd Mullen Research Fellow, International Business and Strategy; Massachusetts Institute of Technology, PhD

**Carlos Cuevas**

Professor, Criminology and Criminal Justice; Alliant International University, PhD

**Meng Cui**

Research Associate Professor, Pharmaceutical Sciences; Jilin University (China), PhD

**Janice Cuny**

Professor of the Practice, Computer Sciences; University of Michigan, PhD

**Derek Curry**

Assistant Professor, Art + Design; University of California, Los Angeles, MFA

**Mary Ellen Cushman**

Professor, English; Rensselaer Polytechnic Institute, PhD

**Guohao Dai**

Associate Professor, Bioengineering; Massachusetts Institute of Technology, PhD

**Elise J. Dallimore**

Associate Professor, Communication Studies; University of Washington, PhD

**James Dana Jr.**

Professor, Economics and International Business and Strategy; Massachusetts Institute of Technology, PhD

**Dan Danielsen**

Professor, Law; Harvard University, JD

**Luis Dau**

Associate Professor and Robert and Denise DiCenso Endowed Professor, International Business and Strategy; University of South Carolina, PhD

**Juliet Davidow**

Assistant Professor, Psychology; Columbia University, PhD

**Duncan Davis**

Assistant Teaching Professor, Engineering; North Carolina State University, PhD

**Martha Davis**

Professor, Law; University of Chicago, JD

**Nicole Davis**

Assistant Clinical Professor, Applied Psychology; Simmons College, MS

**Patricia Davis**

Associate Professor, Communication Studies; University of California, San Diego, PhD

**Theo Davis**

Professor, English; Johns Hopkins University, PhD

**Richard Daynard**

University Distinguished Professor, Law; Massachusetts Institute of Technology, PhD; Harvard University, JD

**Anthony P. De Ritis**

Professor, Music; University of California, Berkeley, PhD

**Michael Dean**

Assistant Teaching Professor, College of Professional Studies; Columbia University, PhD

**Adenekan (Nick) Dedeke**

Lecturer, Supply Chain and Information Management; Technische Universität Kaiserslautern (Germany), PhD

**Melissa DeGrandis**

Assistant Cooperative Education Coordinator, College of Engineering; Ball State University, MA

**Mohammad Dehghanimohammadabadi**

Assistant Teaching Professor, Mechanical and Industrial Engineering; Western New England University, PhD

**Candice Delmas**

Assistant Professor, Philosophy and Religion and Political Science; Boston University, PhD

**Emrecan Demiroz**

Research Assistant Professor, Electrical and Computer Engineering; Northeastern University, PhD

**John Dencker**

Professor, Management and Organizational Development; Harvard University, PhD

**Jack Dennerlein**

Professor, Physical Therapy, Movement, and Rehabilitation Sciences; University of California, PhD

**Megan Denver**

Assistant Professor, Criminology and Criminal Justice; University at Albany, PhD

**Alexander DePaoli**

Assistant Teaching Professor, Marketing; Stanford University, PhD

**Joseph DePasquale**

Associate Teaching Professor, Chemistry and Chemical Biology; Drexel University, PhD

**Jacob Depue**

Assistant Teaching Professor, Communication Studies; University of Minnesota, PhD

**Leila F. Deravi**

Assistant Professor, Chemistry and Chemical Biology; Vanderbilt University, PhD

**Nate Derbinsky**

Associate Teaching Professor, Computer Sciences; University of Michigan, Ann Arbor, PhD

**Harm Derksen**

Professor, Mathematics; University of Basel (Switzerland), PhD

**Nishil Desai**

Associate Teaching Professor, Pharmaceutical Sciences; Mercer University, PhD

**Peter J. Desnoyers**

Associate Professor, Computer Sciences; University of Massachusetts, Amherst, PhD

**Darcey deSouza**

Postdoctoral Teaching Associate, Communication Studies; Rutgers University, PhD

**David A. DeSteno**

Professor, Psychology; Yale University, PhD

**H. William Detrich**

Professor, Marine and Environmental Sciences; Yale University, PhD

**Darin Detwiler**

Assistant Teaching Professor, College of Professional Studies; Northeastern University, PhD

**John W. Devlin**

Professor, Pharmacy and Health Systems Sciences; University of Toronto (Canada), PharmD

**Janet Dewan**

Assistant Clinical Professor, Nursing; Northeastern University, PhD

**Christa Dhimo**

Professor of the Practice, Biotechnology; Northeastern University, MS

**Alessandra Di Credico**

Associate Teaching Professor, Physics; University of Rome (Italy), PhD

**Michele Di Piero**

Assistant Professor, Physics; University of Texas, Austin, PhD

**Panagoula Diamanti-Karanou**

Assistant Teaching Professor, International Affairs; Northeastern University, PhD

**Jacqueline Diani**

Senior Cooperative Education Coordinator, Bouvé College of Health Sciences; University of Virginia, MEd

**Martin Dias**

Associate Teaching Professor, Supply Chain and Information Management; Bentley University, PhD

**Amy DiBattista**

Associate Teaching Professor, Psychology; Northeastern University, PhD

**William Dickens**

Professor, Economics and Public Policy and Urban Affairs; Massachusetts Institute of Technology, PhD

**Elizabeth Dillon**

Professor, English; University of California, Berkeley, PhD

**Charles DiMarzio**

Associate Professor, Electrical and Computer Engineering; Northeastern University, PhD

**Aidong A. Ding**

Associate Professor, Mathematics; Cornell University, PhD



**Kathleen C. Dioli**

Associate Cooperative Education Coordinator, Chemistry and Chemical Biology; Bowling Green State University, MA

**Brandon Dionne**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; University of New England, PharmD

**Daniel L. Distel**

Research Professor, Marine and Environmental Sciences; University of California, San Diego, PhD

**Benjamin Dittbrenner**

Associate Teaching Professor, Marine and Environmental Sciences; University of Washington, PhD

**Jenna DiTullio**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Boston University, MEd

**Margarita V. DiVall**

Clinical Professor, Pharmacy and Health Systems Sciences; Northeastern University, PharmD

**Mary Kate Dodgson**

Assistant Professor, Accounting; University of Massachusetts, Amherst, PhD

**Lisa Cantwell Doherty**

Associate Cooperative Education Coordinator, College of Social Sciences and Humanities; Northeastern University, MA

**Silvia Dominguez**

Associate Professor, Sociology and Anthropology; Boston University, PhD

**Jason Donati**

Visiting Associate Teaching Professor, Art + Design; Rochester Institute of Technology, MFA

**Hua Dong**

Senior Academic Specialist, World Languages Center; Emerson College, MA

**Sijia Dong**

Assistant Professor, Chemistry and Chemical Biology; California Institute of Technology, PhD

**Pamela Donlan**

Assistant Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, PhD

**Larisa Doroshenko**

Postdoctoral Teaching Associate, Communication Studies; University of Wisconsin, Madison, PhD

**Brenda Douglas**

Associate Clinical Professor, Nursing; Northeastern University, DNP

**Daniel C. Douglass**

Associate Teaching Professor, Marine and Environmental Sciences; University of Wisconsin, PhD

**Mark Douglass**

Associate Clinical Professor, Pharmacy and Health Systems Sciences; University of Michigan, PharmD

**Kevin Drakulich**

Associate Professor, Criminology and Criminal Justice; University of Washington, PhD

**Timothy Dransfield**

Assistant Teaching Professor, Chemistry and Chemical Biology; Harvard University, PhD

**Andrea Dropkin**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Bentley University, MBA

**Laura Dudley**

Assistant Clinical Professor, Applied Psychology; Northeastern University, PhD

**Lisa Duffy**

Assistant Professor, Nursing; Boston College, DNP

**Tara Duffy**

Associate Teaching Professor, Marine and Environmental Sciences; Stony Brook University, PhD

**Michael Dukakis**

Distinguished Professor, Political Science; Harvard University, JD

**Daniel M. Dulaski**

Teaching Professor, Civil and Environmental Engineering; University of Massachusetts, Amherst, PhD

**Evan Dummit**

Assistant Teaching Professor, Mathematics; University of Wisconsin, Madison, PhD

**Catherine Dunand**

Assistant Academic Specialist, World Languages Center; Boston University, MA

**Jill Dupree**

Assistant Teaching Professor, Economics; University of Colorado, Boulder, PhD

**Kathleen Durant**

Assistant Teaching Professor, Computer Sciences; Harvard University, PhD

**Jennifer G. Dy**

Professor, Electrical and Computer Engineering; Purdue University, PhD

**Rashmi Dyal-Chand**

Professor, Law; Harvard University, JD

**Eno Ebong**

Associate Professor, Chemical Engineering; Rensselaer Polytechnic Institute, PhD

**Stephanie Eby**

Associate Teaching Professor, Marine and Environmental Sciences; Syracuse University, PhD

**Rajagopal Echambadi**

Professor, Entrepreneurship and Innovation; University of Houston, PhD

**Matthew Eckelman**

Associate Professor, Civil and Environmental Engineering; Yale University, PhD

**Kimberly Eddleston**

Professor, Entrepreneurship and Innovation; University of Connecticut, PhD

**Laurie Edwards**

Associate Teaching Professor, Writing Program; Emerson College, MFA

**Jessica Edwards George**

Associate Clinical Professor, Applied Psychology; Northeastern University, PhD

**Christopher L. Egan**

Assistant Cooperative Education Coordinator, College of Science; Boston University, MA

**Robert C. Eidson**

Assistant Teaching Professor, Psychology; Northeastern University, PhD

**Stanley J. Eigen**

Professor, Mathematics; McGill University (Canada), PhD

**Adam Ekenseair**

Assistant Professor, Chemical Engineering; University of Texas, Austin, PhD

**Ehsan Elhamifar**

Assistant Professor, Computer Sciences; Johns Hopkins University, PhD

**Tina Eliassi-Rad**

Associate Professor, Computer Sciences; University of Wisconsin, Madison, PhD

**B. Parker Ellen**

Assistant Professor, Management and Organizational Development; Florida State University, PhD

**Ryan Ellis**

Assistant Professor, Communication Studies; University of California, San Diego, PhD

**Constance Emerson**

Assistant Academic Specialist, College of Professional Studies; Purdue University, West Lafayette, MS

**John R. Engen**

Distinguished Professor, Chemistry and Chemical Biology and Barnett Institute; University of Nebraska, Lincoln, PhD

**Christen Enos**

Associate Teaching Professor, Writing Program; Emerson College, MFA

**Michael Enright**

Pierre Choueiri Family Professor in Global Business, International Business and Strategy; Harvard University, PhD

**Slava S. Epstein**

Professor, Biology; Moscow State University (Russia), PhD

**Randall Erb**

Associate Professor, Mechanical and Industrial Engineering; Duke University, PhD

**Deniz Erdogmus**

Professor, Electrical and Computer Engineering; University of Florida, PhD

**Ozlem Ergun**

Professor, Mechanical and Industrial Engineering; Massachusetts Institute of Technology, PhD

**Cuneyt Eroglu**

Associate Professor, Supply Chain and Information Management; Ohio State University, PhD

**Bilge Erten**

Assistant Professor, International Affairs and Economics; University of Massachusetts, Amherst, PhD

**Rhea T. Eskew**

Professor, Psychology; Georgia Institute of Technology, PhD

**Jonathan Esole**

Associate Professor, Mathematics; Leiden University (Netherlands), PhD

**Abigail Evans**

Lecturer, Computer Sciences; University of Washington, PhD

**Sara Ewell**

Teaching Professor, College of Professional Studies; University of North Carolina, Chapel Hill, PhD

**William Ewell**

Associate Teaching Professor, College of Professional Studies; University of North Carolina, Chapel Hill, PhD

**Daniel Faber**

Professor, Sociology and Anthropology; University of California, Santa Cruz, PhD

**Mary Lynn Fahey**

Clinical Instructor, Nursing; Simmons College, MS

**Olubunmi Faleye**

Professor, Finance; University of Alberta (Canada), PhD

**Don Fallis**

Professor, Philosophy and Religion and Computer Sciences; University of California, Irvine, PhD

**Hui Fang**

Assistant Professor, Electrical and Computer Engineering; University of California, Berkeley, PhD

**Qianqian Fang**

Assistant Professor, Bioengineering; Dartmouth College, PhD

**David Fannon**

Assistant Professor, Architecture and Civil and Environmental Engineering; University of California, Berkeley, MS

**Nasser S. Fard**

Associate Professor, Mechanical and Industrial Engineering; University of Arizona, PhD

**Amir Farhat**

Associate Teaching Professor, Electrical and Computer Engineering; University of Pennsylvania, PhD

**Johanna E. Farkas**

Assistant Teaching Professor, Biology; Northeastern University, PhD

**Amy Farrell**

Associate Professor, Criminology and Criminal Justice; Northeastern University, PhD

**Yunsi Fei**

Professor, Electrical and Computer Engineering; Princeton University, PhD

**Adrian E. Feiguin**

Associate Professor, Physics; Universidad Nacional de Rosario (Argentina), PhD

**Allen G. Feinstein**

Teaching Professor, Music; New England Conservatory of Music, MM

**Nathan I. Felde**

Professor, Art + Design; Massachusetts Institute of Technology, MS

**Matthias Felleisen**

Trustee Professor, Computer Sciences; Indiana University, PhD

**Carol Femia**

Clinical Instructor, Nursing; Massachusetts General Hospital Institute of Health Professions, MS

**Hicham Fenniri**

Professor, Chemical Engineering; Université de Strasbourg (France), PhD

**Loretta A. Fernandez**

Assistant Professor, Civil and Environmental Engineering and Marine and Environmental Sciences; Massachusetts Institute of Technology, PhD

**Melissa Ferrick**

Professor of the Practice, Music; Harvard University, MA

**Lori Ferrins**

Research Assistant Professor, Chemistry and Chemical Biology; Monash University (Australia), PhD

**Craig F. Ferris**

Professor, Psychology and Pharmaceutical Sciences; New York Medical College, PhD

**Kirsten Fertuck**

Associate Teaching Professor, Biochemistry; Michigan State University, PhD

**Gregory A. Fiete**

Professor, Physics; Harvard University, PhD

**Susan F. Fine**

Clinical Instructor, Communication Sciences and Disorders; New York University, MA

**Sarah Finn**

Associate Teaching Professor, Writing Program; University of Massachusetts, Amherst, PhD

**Jessica Fisher**

Assistant Cooperative Education Coordinator, College of Engineering; Bridgewater State University, MEd

**Branden Fitelson**

Distinguished Professor, Philosophy and Religion; California Institute of Technology, PhD

**Brian Fitzgerald**

Assistant Professor, Accounting; Texas AM University, PhD

**Joan Fitzgerald**

Professor, Public Policy and Urban Affairs; Pennsylvania State University, PhD

**Diane F. Fitzpatrick**

Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, DPT

**Josephine Flanagan**

Assistant Cooperative Education Coordinator, College of Engineering; Suffolk University, JD

**Julia Flanders**

Professor of the Practice, English and Library Systems; Brown University, PhD

**Eric Folmar**

Assistant Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Quinnipiac University, MS

**Paul Fombelle**

Associate Professor and Thomas E. Moore Faculty Fellow, Marketing; Arizona State University, PhD

**Ellen Fontana**

Associate Teaching Professor, Communication Studies; University of California, Davis, MA

**Murray Forman**

Professor, Media and Screen Studies; McGill University (Canada), PhD

**Lisa M. Foster**

Assistant Cooperative Education Coordinator, Bouvé College of Health Sciences; Northeastern University, MS

**Dimitrios Fotiadis**

Lecturer, Supply Chain and Information Management; Northeastern University, MS

**Charles F. Fountain**

Professor, Journalism; Columbia University, MS

**James Fox**

Lipman Family Professor of Criminology, Law, and Public Policy, Criminology and Criminal Justice and Law and Public Policy; University of Pennsylvania, PhD

**Erica P. Frank**

Assistant Teaching Professor, Biology; Baylor College of Medicine, PhD

**Debra L. Franko**

Professor, Applied Psychology; McGill University (Canada), PhD

**Peter Fraunholtz**

Assistant Teaching Professor, History and International Affairs; Boston College, PhD

**Julian M. Fray**

Assistant Teaching Professor, Law; Columbia University, JD

**Susan Freeman**

Teaching Professor, Engineering; Northeastern University, PhD

**Clark Freifeld**

Lecturer, Computer Sciences; Boston University, PhD

**Michael Fregel**

Associate Academic Specialist, Music; City University London (United Kingdom), PhD

**John H. Friar**

Senior Academic Specialist, Entrepreneurship and Innovation; Massachusetts Institute of Technology, PhD

**Alex Fronduto**

Assistant Teaching Professor, College of Professional Studies; MCPHS University, PhD

**Natasha Frost**

Professor, Criminology and Criminal Justice; City University of New York, PhD

**Yun (Raymond) Fu**

Professor, Electrical and Computer Engineering and Computer Sciences; University of Illinois, Urbana-Champaign, PhD

**Carolin Fuchs**

Teaching Professor, World Languages Center; Justus-Liebig Universität Gießen (Germany), PhD

**Brian Fulton**

Associate Teaching Professor, Chemistry and Chemical Biology; Iowa State University, PhD

**Peter G. Furth**

Professor, Civil and Environmental Engineering; Massachusetts Institute of Technology, PhD

**Laurel Gabard-Durnam**

Assistant Professor, Psychology; Columbia University, PhD

**Timothy Gagnon**

Associate Academic Specialist, Accounting; Sacred Heart University, MBA

**Sean Gallagher**

Assistant Clinical Professor, College of Professional Studies; Northeastern University, EdD

**Susan Gallagher**

Clinical Instructor, Nursing; Massachusetts General Hospital Institute of Health Professions, MS

**Joshua Galloway**

William O. DiPietro Assistant Professor, Chemical Engineering; Columbia University, PhD

**Auroop Ganguly**

Professor, Civil and Environmental Engineering; Massachusetts Institute of Technology, PhD

**Denise Garcia**

Associate Professor, Political Science and International Affairs; University of Geneva (Switzerland), PhD

**Lori Gardinier**

Teaching Professor, Human Services; Northeastern University, PhD

**Julie Garey**

Assistant Teaching Professor, Political Science; Northeastern University, PhD

**Karen Garneau**

Associate Teaching Professor, Writing Program; Northeastern University, PhD

**Julia Garrett**

Associate Teaching Professor, English; University of California, Santa Barbara, PhD

**Myles Garvey**

Assistant Teaching Professor, Marketing; Rutgers University, PhD

**Wolfgang Gatterbauer**

Associate Professor, Computer Sciences; Vienna University of Technology (Austria), PhD

**Edward Geisinger**

Assistant Professor, Biology; New York University, MD, PhD

**Prasanth George**

Associate Teaching Professor, Mathematics; State University of New York, Buffalo, PhD

**Francis Georges**

Assistant Teaching Professor, Economics; Boston College, PhD

**Siddhartha Ghosh**

Assistant Professor, Electrical and Computer Engineering; Carnegie Mellon University, PhD

**Joan Giblin**

Assistant Teaching Professor, College of Professional Studies; Old Dominion University, PhD

**Roger W. Giese**

Professor, Pharmaceutical Sciences; Massachusetts Institute of Technology, PhD

**Joseph M. Giglio**

Senior Academic Specialist, International Business and Strategy; Northeastern University, PhD

**Laurance Ginsberg**

Assistant Academic Specialist, Accounting; Bentley University, MST

**Leonard J. Glick**

Senior Academic Specialist, Management and Organizational Development; Harvard University, EdD

**Elizabeth Glowacki**

Postdoctoral Teaching Associate, Communication Studies; University of Texas, Austin, PhD

**Zoltan Gluck**

Assistant Professor, Sociology and Anthropology and International Affairs; City University of New York, PhD

**Daniel Godfrey**

Professor, Music; University of Iowa, PhD

**Veronica S. Godoy-Carter**

Associate Professor, Biology; Tufts University, PhD

**Kevin Gold**

Assistant Teaching Professor, Computer Sciences; Yale University, PhD

**Stephen Golden**

Associate Teaching Professor, Entrepreneurship and Innovation; Suffolk University, MBA

**William Goldman**

Senior Lecturer, Accounting; Northeastern University, MBA

**Ann C. Golub-Victor**

Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, DPT

**Edgar D. Goluch**

Associate Professor, Chemical Engineering; University of Illinois, Urbana-Champaign, PhD

**Kathleen Gonso**

Teaching Professor, Writing Program; Emerson College, MFA

**Michael J. Gonyeau**

Clinical Professor, Pharmacy and Health Systems Sciences; Albany College of Pharmacy, PharmD

**Frankie Gonzalez**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Northeastern University, BS

**Gregory Goodale**

Associate Professor, Communication Studies; University of Illinois, Urbana-Champaign, PhD

**Teresa Goode**

Associate Teaching Professor, College of Professional Studies; Columbia University, EdD

**Patricia Goodman**

Assistant Teaching Professor, College of Professional Studies; George Washington University, EdD

**Matthew Goodwin**

Associate Professor, Health Sciences and Computer Sciences; University of Rhode Island, PhD

**Mark Gooley**

Associate Teaching Professor, Finance; Northeastern University, PhD

**Samantha Gorman**

Assistant Professor, Art + Design; University of Southern California, PhD

**Ian Gorton**

Professor of the Practice, Computer Sciences; Sheffield Hallam University (United Kingdom), PhD

**Gary Goshgarian**

Professor, English; University of Wisconsin, Madison, PhD

**Tarik C. Gouhier**

Associate Professor, Marine and Environmental Sciences; McGill University (Canada), PhD

**Thomas Goulding**

Professor of the Practice, College of Professional Studies; University of Florida, PhD

**Andrew Gouldstone**

Professor, Mechanical and Industrial Engineering; Massachusetts Institute of Technology, PhD

**Jonathan H. Grabowski**

Professor, Marine and Environmental Sciences; University of North Carolina, Chapel Hill, PhD

**Susan Gracia**

Assistant Teaching Professor, College of Professional Studies; Boston College, PhD

**Jennifer Gradecki**

Assistant Professor, Art + Design; University of California, Los Angeles, MFA

**Anthony P. Graffeo**

Professor of the Practice, Biotechnology; Northeastern University, PhD

**Steven Granelli**

Assistant Teaching Professor, Communication Studies; Ohio University, PhD

**Laura Green**

Professor, English; University of California, Berkeley, PhD

**Kristin Curry Greenwood**

Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, EdD, DPT

**Brent Griffin**

Assistant Teaching Professor, College of Professional Studies; Northeastern University, PhD

**Jacqueline Griffin**

Assistant Professor, Mechanical and Industrial Engineering; Georgia Institute of Technology, PhD

**Joseph Griffin**

Associate Teaching Professor, College of Professional Studies; Gordon Conwell Theological Seminary, PhD

**Mary J. Griffin**

Associate Clinical Professor, Nursing; University of North Carolina, PhD

**John Griffith**

Clinical Professor, Health Sciences; Boston University, PhD

**Amir Grinstein**

Associate Professor and Thomas E. Moore Faculty Fellow, Marketing; Hebrew University of Jerusalem (Israel), PhD

**Francesca Grippa**

Teaching Professor, College of Professional Studies; University of Salento (Italy), PhD

**Tiantian Gu**

Associate Professor, Finance; University of Wisconsin, Madison, PhD

**Arjun Guha**

Assistant Professor, Computer Sciences; Brown University, PhD

**Jennifer Guillemin**

Senior Cooperative Education Coordinator, College of Arts, Media and Design; Boston University, MA

**Hemanth Gundavaram**

Clinical Professor, Law; Boston University, JD

**Jason J. Guo**

Research Associate Professor, Barnett Institute; University of Connecticut, PhD

**Surendra M. Gupta**

Professor, Mechanical and Industrial Engineering; Purdue University, PhD

**Andrei Guschin**

Assistant Teaching Professor, Graduate School of Engineering; Russian Academy of Sciences (Russian Federation), PhD

**Philip Gust**

Clinical Instructor, Computer Sciences; University of Arizona, MS

**Barbara Guthrie**

Professor, Nursing; New York University, PhD

**Kayoll Gyan**

Assistant Professor, Nursing; University of North Carolina, Chapel Hill, PhD

**Mohamed Habibullah**

Assistant Teaching Professor, Supply Chain and Information Management; University of Missouri, Columbia, PhD

**Katherine Haenschen**

Assistant Professor, Communication Studies and Political Science; University of Texas, Austin, PhD

**David Hagen**

Assistant Teaching Professor, College of Professional Studies; New England School of Law, JD

**Michelle Hagopian**

Associate Cooperative Education Coordinator, College of Arts, Media and Design; University of Illinois, MS

**Margaret Hahn-Dupont**

Teaching Professor, Law; Georgetown University, JD

**Jerome F. Hajjar**

CDM Smith Professor in Civil Engineering, Civil and Environmental Engineering; Cornell University, PhD

**Golnoosh Hakimdavar**

Associate Teaching Professor, College of Professional Studies; University of Turin (Italy), PhD

**Iva Halacheva**

Zelevinsky Research Instructor, Mathematics; University of Toronto, PhD

**Mary Hale**

Assistant Teaching Professor, Architecture; Massachusetts Institute of Technology, MArch

**Danielle Haley**

Assistant Professor, Health Sciences; Emory University, PhD

**Kristina Hals**

Assistant Cooperative Education Coordinator, College of Engineering; Cornell University, MS

**James Halverson**

Assistant Professor, Physics; University of Pennsylvania, PhD

**Paul Hand**

Assistant Professor, Mathematics and Computer Sciences; New York University, PhD

**Robert N. Hanson**

Matthews Distinguished University Professor, Chemistry and Chemical Biology; University of California, Berkeley, PhD

**Matan Harel**

Assistant Professor, Mathematics; Courant Institute, PhD

**Sharon Harlan**

Professor, Health Sciences and Sociology and Anthropology; Cornell University, PhD

**Kelly Harrington**

Associate Cooperative Education Coordinator, D'Amore-McKim School of Business; Suffolk University, MBA

**Shaunna Harrington**

Associate Academic Specialist, College of Professional Studies; Boston University, MA

**Vincent Harris**

University Distinguished Professor, William Lincoln Smith Professor of Electrical and Computer Engineering, Electrical and Computer Engineering; Northeastern University, PhD

**Vanecia Harrison**

Associate Cooperative Education Coordinator, College of Science; Emmanuel College, MA

**Casper Hartevelde**

Associate Professor, Game Design; Delft University of Technology (Netherlands), PhD

**Stephanie R. Hartung**

Teaching Professor, Law; Boston College, JD

**Woodrow N. Hartzog**

Professor, Law and Computer Sciences; University of North Carolina, Chapel Hill, PhD

**Sara Hashmi**

Assistant Professor, Chemical Engineering; Yale University, PhD

**Christopher Hasson**

Assistant Professor, Physical Therapy, Movement, and Rehabilitation Sciences; University of Massachusetts, Amherst, PhD

**Stephen Hatfield**

Assistant Professor, Pharmaceutical Sciences; Northeastern University, PhD

**Heather Hauck**

Senior Cooperative Education Coordinator, D'Amore-McKim School of Business; Northeastern University, MS

**Claudia Haupt**

Associate Professor, Law and Political Science; Columbia University, JSD; University of Cologne (Germany), PhD

**Thomas Havens**

Professor, History; University of California, Berkeley, PhD

**Fareed Hawwa**

Assistant Teaching Professor, College of Professional Studies; Louisiana State University, PhD

**Lorna Hayward**

Associate Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Boston University, EdD

**Julia Hechtman**

Associate Teaching Professor, Art + Design; University of Illinois, Chicago, MFA

**Meghan Heckman**

Assistant Professor, Journalism; Northeastern University, MA

**Gretchen Heefner**

Associate Professor, History; Yale University, PhD

**Donald E. Heiman**

Professor, Physics; University of California, Irvine, PhD



**Amy Helburn**

Lorraine C. Snell Visiting Professor, Health Sciences; University of Massachusetts, PhD

**Brian Helmuth**

Professor, Marine and Environmental Sciences and Public Policy and Urban Affairs; University of Washington, PhD

**Jason Hemann**

Lecturer, Computer Sciences; Indiana University, PhD

**Carlene Hempel**

Associate Teaching Professor, Journalism; University of North Carolina, Chapel Hill, MA

**Jamie G. Henzy**

Associate Teaching Professor, Biology; Tufts University School of Medicine, PhD

**Dale Herbeck**

Professor, Communication Studies; University of Iowa, PhD

**Angela Herbert**

Assistant Academic Specialist, American Sign Language; Northeastern University, BS

**David A. Herlihy**

Teaching Professor, Music; Boston College, JD

**Catalina Herrera Almanza**

Assistant Professor, Economics and International Affairs; Cornell University, PhD

**Richard Herron**

Associate Teaching Professor, Finance; City University of New York, PhD

**Carie Hersh**

Associate Teaching Professor, Sociology and Anthropology; Duke University, JD

**Kelsey Hersh**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Northeastern University, MS

**Joshua Hertz**

Associate Teaching Professor, Engineering; Massachusetts Institute of Technology, PhD

**Benjamin Hescott**

Teaching Professor, Computer Sciences; Boston University, PhD

**Ravit Heskiau**

Visiting Lecturer, Management and Organizational Development; University of Toronto (Canada), PhD

**Kamber Hetrick**

Assistant Professor, Accounting; University of Illinois, Urbana-Champaign, PhD

**Babak Heydari**

Associate Professor, Mechanical and Industrial Engineering; University of California, Berkeley, PhD

**Mary J. Hickey**

Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, DPT

**Carlos Hidrovo Chavez**

Assistant Professor, Mechanical and Industrial Engineering; Massachusetts Institute of Technology, PhD

**Matthew Higger**

Lecturer, Computer Sciences; Northeastern University, PhD

**Malcolm D. Hill**

Associate Professor, Marine and Environmental Sciences; University of California, Santa Cruz, PhD

**Charles H. Hillman**

Professor, Psychology and Health Sciences; University of Maryland, College Park, PhD

**Robin Hillyard**

Associate Teaching Professor, Graduate School of Engineering; Cambridge University (United Kingdom), PhD

**John Hinson**

Associate Teaching Professor, Theatre; Brandeis University, MFA

**Tad Hirsch**

Professor, Art + Design; Massachusetts Institute of Technology, PhD

**Hubert Ho**

Assistant Teaching Professor, Music; University of California, Berkeley, PhD

**Marie Odile Hobeika**

Visiting Lecturer, Communication Studies; University of Pittsburgh, PhD

**Lynda Hodgson**

Associate Teaching Professor, College of Professional Studies; Virginia Commonwealth University, PhD

**Timothy Hoff**

Professor, Management and Organizational Development and Public Policy and Urban Affairs; State University of New York, Albany, PhD

**Jessica Hoffman**

Associate Professor, Applied Psychology; Lehigh University, PhD

**Matthew Hogencamp**

Assistant Professor, Mathematics; University of Virginia, PhD

**Uwe Hohgrawe**

Professor of the Practice, College of Professional Studies; University of Wuppertal (Germany), PhD

**Udi Hoitash**

Professor and Lillian L. and Harry A. Cowan Research Professor, Accounting; Rutgers University, PhD

**Wallace Holohan**

Senior Clinical Specialist, Law; Fitchburg State University, BA

**Julia Hopkins**

Assistant Professor, Civil and Environmental Engineering; Massachusetts Institute of Technology, PhD

**Michael J. Hoppmann**

Associate Teaching Professor, Communication Studies; University of Tübingen (Germany), PhD

**Emily Hornsby**

Assistant Cooperative Education Coordinator, College of Arts, Media and Design; Bowling Green State University, MA

**Adam Hosein**

Associate Professor, Philosophy and Religion; Massachusetts Institute of Technology, PhD

**Jeffrey P. Howe**

Associate Professor, Journalism; Boston University, MFA

**Valerie Hower**

Associate Teaching Professor, Mathematics; University of Georgia, PhD

**Anne R. Hughes**

Associate Professor, Marine and Environmental Sciences; University of California, Davis, PhD

**Francisco Hung**

Associate Professor, Chemical Engineering; North Carolina State University, PhD

**Matthew Hunt**

Professor, Sociology and Anthropology; Indiana University, PhD

**Patrick Hurley**

Assistant Professor, Accounting; University of Wisconsin, Madison, PhD

**Mark Huselid**

Distinguished Professor of Workforce Analytics, International Business and Strategy; State University of New York, Buffalo, PhD

**Roxana E. Iacob**

Research Associate Professor, Chemistry and Chemical Biology; Konstanz University (Germany), PhD

**Anthony Iarrobino**

Professor, Mathematics; Massachusetts Institute of Technology, PhD

**Patricia Illingworth**

Professor, Philosophy and Religion; University of California, San Diego, PhD; Boston University, JD

**Jennifer Ingemi**

Assistant Teaching Professor, Behavioral Neuroscience; University of Massachusetts, PhD

**Vinay K. Ingle**

Associate Professor, Electrical and Computer Engineering; Rensselaer Polytechnic Institute, PhD

**Francesca Inglese**

Assistant Professor, Music; Brown University, PhD

**Rei Inouye**

Teaching Professor, World Languages Center; Temple University, PhD

**Stephen S. Intille**

Associate Professor, Computer Sciences and Health Sciences; Massachusetts Institute of Technology, PhD

**Efstratios Ioannidis**

Assistant Professor, Electrical and Computer Engineering; University of Toronto (Canada), PhD

**Andreia Ionescu**

Assistant Professor, Biology; University of Rochester Medical School, PhD

**Roderick Ireland**

Distinguished Professor, Criminology and Criminal Justice; Harvard University, LL.M.; Northeastern University, PhD

**Derek M. Isaacowitz**

Professor, Psychology; University of Pennsylvania, PhD

**Jacqueline A. Isaacs**

Professor, Mechanical and Industrial Engineering; Massachusetts Institute of Technology, PhD

**Michelle L. Israel**

Senior Cooperative Education Coordinator, College of Science; Northeastern University, MS

**Nathan E. Israeloff**

Associate Professor, Physics; University of Illinois, Urbana-Champaign, PhD

**Alexander R. Ivanov**

Associate Professor, Chemistry and Chemical Biology; Russian Academy of Science, Institute of Bioorganic Chemistry (Moscow), PhD

**Julia Ivy**

Associate Teaching Professor, International Business and Strategy; Lancaster University (United Kingdom), PhD

**Aldan Jackson**

Associate Clinical Professor, Computer Sciences; University of Delaware, PhD

**Denise Jackson**

Associate Professor, Psychology; University of Pittsburgh, PhD

**Ellen Jackson**

Assistant Teaching Professor, Writing Program; Stanford University, MFA

**William J. Jackson**

Senior Cooperative Education Coordinator, College of Arts, Media and Design; University of Massachusetts, Boston, MEd

**Michelle Jacobs**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; University of California, San Francisco, PharmD

**Bruce Jacoby**

Associate Clinical Professor, Law; University of Connecticut, JD

**Beverly Jaeger-Helton**

Teaching Professor, Mechanical and Industrial Engineering; Northeastern University, PhD

**Michael Jaeggli**

Associate Teaching Professor, Bioengineering; Clemson University, PhD

**Safa Jamali**

Assistant Professor, Mechanical and Industrial Engineering; Case Western Reserve University, PhD

**David Janero**

Visiting Professor, Pharmaceutical Sciences; Yale University, PhD

**Caitlyn Jarvis**

Postdoctoral Teaching Associate, Communication Studies; Purdue University, PhD

**Solomon M. Jekel**

Associate Professor, Mathematics; Dartmouth College, PhD

**Mason Jenkins**

Visiting Assistant Professor, Marketing; Northeastern University, PhD

**Qingying Jia**

Research Associate Professor, Chemistry and Chemical Biology; Illinois Institute of Technology, PhD

**Holly Jimison**

Professor of the Practice, Computer Sciences and Nursing; Stanford University, PhD

**Xiaoning Jin**

Assistant Professor, Mechanical and Industrial Engineering; University of Michigan, PhD

**Xuemin Jin**

Associate Teaching Professor, Mechanical and Industrial Engineering; University of Maryland, PhD

**Donghee Jo**

Assistant Professor, Economics; Duke University, MA

**Dinesh John**

Assistant Professor, Health Sciences; University of Tennessee, PhD

**Brooke Johnson**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Boston College, MEd

**Deborah L. Johnson**

Assistant Teaching Professor, Law; Northeastern University, JD

**Steven Johnson**

Assistant Cooperative Education Coordinator, College of Engineering; Suffolk University, MS

**Vanessa D. Johnson**

Associate Professor, Applied Psychology; Western Michigan University, PhD

**Akhenaton-Andrew Jones III**

Assistant Professor, Chemical Engineering; Massachusetts Institute of Technology, PhD

**Rachel Jones**

Associate Professor, Nursing; New York University, PhD

**Dierdre Jordan**

Associate Cooperative Education Coordinator, Bouvé College of Health Sciences; Northeastern University, MS

**Josep Jornet**

Associate Professor, Electrical and Computer Engineering; Georgia Institute of Technology, PhD

**Tiffany Joseph**

Associate Professor, Sociology and Anthropology and International Affairs; University of Michigan, PhD

**Neel Joshi**

Associate Professor, Chemistry and Chemical Biology; University of California, Berkeley, PhD

**Jacqueline Josselyn**

Assistant Cooperative Education Coordinator, College of Engineering; Northeastern University, MS

**Alison Joyce**

Assistant Cooperative Education Coordinator, College of Engineering; Ohio University, MEd

**Maria Jump**

Associate Teaching Professor, Computer Sciences; University of Texas, Austin, PhD

**Yung Joon Jung**

Professor, Mechanical and Industrial Engineering; Rensselaer Polytechnic Institute, PhD

**Jeffrey Juris**

Associate Professor, Sociology and Anthropology; University of California, Berkeley, PhD

**David R. Kaeli**

College of Engineering Distinguished Professor, Electrical and Computer Engineering; Rutgers University, PhD

**Jonathan D. Kahn**

Professor, Law and Biology; University of California, Berkeley, JD; Cornell University, PhD

**Sallyann Kakas**

Assistant Cooperative Education Coordinator, Finance; Northeastern University, BS

**Sagar V. Kamarthi**

Professor, Mechanical and Industrial Engineering; Pennsylvania State University, PhD

**John Kane**

Lecturer, Art + Design; Yale University, BA

**Mary M. Kane**

Senior Cooperative Education Coordinator, D'Amore-McKim School of Business; University of Massachusetts, Boston, MEd

**Michael Kane**

Assistant Professor, Civil and Environmental Engineering; University of Michigan, PhD

**Sarah Kanouse**

Associate Professor, Art + Design; University of Illinois, Urbana-Champaign, MFA

**Carla Kaplan**

Davis Distinguished Professor in American Literature, English and Women's, Gender, and Sexuality Studies; Northwestern University, PhD

**Swastik Kar**

Associate Professor, Physics; Indian Institute of Physics (India), PhD

**Samina Karim**

Professor, Entrepreneurship and Innovation; University of Michigan, PhD

**Yael Karlinsky Shichor**

Assistant Professor, Marketing; Columbia University, PhD

**Alain S. Karma**

College of Arts and Sciences Distinguished Professor, Physics; University of California, Santa Barbara, PhD

**Edward Katz**

Associate Teaching Professor, Computer Sciences; University of Louisiana, Lafayette, PhD

**Ralph Katz**

Professor, Entrepreneurship and Innovation; University of Pennsylvania, PhD

**Jonathan Kaufman**

Professor, Journalism; Harvard University, MA

**Kelsey Kaul**

Assistant Cooperative Education Coordinator, College of Engineering;  
Harvard Graduate School of Education, MEd

**William Kay**

Associate Professor, Political Science; Indiana University, PhD

**Bret Keeling**

Teaching Professor, Writing Program; University of Washington, PhD

**Maureen Kelleher**

Associate Professor, Sociology and Anthropology; University of Missouri,  
Columbia, PhD

**Karen P. Kelley**

Senior Cooperative Education Coordinator, College of Engineering;  
Northeastern University, MEd

**Thomas M. Kelley**

Associate Teaching Professor, Physics; University of Minnesota, PhD

**Kathleen Kelly**

Professor, English; University of North Carolina, Chapel Hill, PhD

**Mary Kelting**

Associate Professor, Philosophy and Religion; University of Wisconsin,  
Madison, PhD

**Daniel D. Kennedy**

Associate Professor, Journalism; Boston University, MLA

**Sarmann Kennedy**

Assistant Teaching Professor, College of Professional Studies; SKEMA  
Business School (France), PhD

**Aileen Kent Yates**

Assistant Cooperative Education Coordinator, Computer Sciences;  
University of Massachusetts, Amherst, BA

**Heidi Kevoe Feldman**

Associate Professor, Communication Studies; Rutgers University, PhD

**Leila Keyvani Someh**

Assistant Teaching Professor, Engineering; Northeastern University, PhD

**Ban-An Khaw**

Professor, Pharmaceutical Sciences; Boston College, PhD

**Konstantin Khrapko**

Professor, Biology and Pharmaceutical Sciences; Engelhardt Institute of  
Molecular Biology, Moscow (Russia), PhD

**Ilham Khuri-Makdisi**

Associate Professor, History; Harvard University, PhD

**Sheri Kiami**

Assistant Clinical Professor, Physical Therapy, Movement, and  
Rehabilitation Sciences; Simmons College, DPT

**Angela Kilby**

Assistant Professor, Economics; Massachusetts Institute of Technology,  
PhD

**Daniel Kim**

Associate Professor, Health Sciences; University of Toronto (Canada),  
MD; Harvard University, PhD

**Eunsong Kim**

Assistant Professor, English; University of Texas, Austin, PhD

**Jonghan Kim**

Assistant Professor, Pharmaceutical Sciences; Ohio State University, PhD

**Miso Kim**

Assistant Professor, Art + Design; Carnegie Mellon University, PhD

**Somy Kim**

Associate Teaching Professor, Writing Program; University of California,  
San Diego, PhD

**Tiffany Kim**

Assistant Clinical Professor, Nursing; University of Pennsylvania, PhD

**Yong-Bin Kim**

Professor, Electrical and Computer Engineering; Colorado State  
University, PhD

**John Kimani**

Associate Teaching Professor, Electrical and Computer Engineering;  
University of Wisconsin, Milwaukee, PhD

**David L. Kimbro**

Associate Professor, Marine and Environmental Sciences; University of  
California, Davis, PhD

**Nancy Kimelman**

Associate Teaching Professor, Economics; Brown University, PhD

**Christopher K. King**

Professor, Mathematics; Harvard University, PhD

**Stephanie Kirby**

Assistant Cooperative Education Coordinator, College of Engineering;  
Carnegie Mellon University, PhD

**Margaret Kirchoff**

Associate Teaching Professor, College of Professional Studies; George  
Washington University, EdD

**Engin Kirda**

Professor, Computer Sciences and Electrical and Computer Engineering;  
Technical University of Vienna (Austria), PhD

**Rein U. Kirss**

Associate Professor, Chemistry and Chemical Biology; University of  
Wisconsin, Madison, PhD

**Jennifer L. Kirwin**

Clinical Professor, Pharmacy and Health Systems Sciences; Northeastern  
University, PharmD

**Risa Kitagawa**

Assistant Professor, Political Science and International Affairs; Stanford  
University, PhD

**Carrie Klaphake**

Assistant Cooperative Education Coordinator, College of Engineering;  
Eastern Illinois University, MS

**Karl E. Klare**

Matthews Distinguished University Professor, Law; Harvard University, JD

**Alan Klein**

Professor, Sociology and Anthropology; State University of New York, Buffalo, PhD

**Kristian KloECKl**

Associate Professor, Art + Design and Architecture; University of Venice (Italy), PhD

**Adriana Knouf**

Assistant Professor, Art + Design; Cornell University, PhD

**Ben Knudsen**

Assistant Professor, Mathematics; Northwestern University, PhD

**Dami Ko**

Assistant Professor, Nursing; University of Wisconsin, Madison, PhD

**Thomas Koenig**

Professor, Sociology and Anthropology; University of California, Santa Barbara, PhD

**Mieczyslaw M. Kokar**

Professor, Electrical and Computer Engineering; University of Wroclaw (Poland), PhD

**Tali Konry**

Assistant Professor, Pharmaceutical Sciences; Ben Gurion University (Israel), PhD

**Constantin Konstantopoulos**

Associate Teaching Professor, Graduate School of Engineering; Boston University, PhD

**Abigail N. Koppes**

Assistant Professor, Chemical Engineering; Rensselaer Polytechnic Institute, PhD

**Ryan Koppes**

Assistant Professor, Chemical Engineering; Rensselaer Polytechnic Institute, PhD

**Ilka Kostka**

Associate Teaching Professor, College of Professional Studies; New York University, PhD

**Apoorva Koticha**

Associate Teaching Professor, Finance; New York University, PhD

**Harilaos Koutsopoulos**

Professor, Civil and Environmental Engineering; Massachusetts Institute of Technology, PhD

**Linda Kowalcky**

Professor of the Practice, Public Policy and Urban Affairs; Johns Hopkins University, PhD

**Arthur F. Kramer**

Professor, Psychology; University of Illinois, PhD

**Sergey Kravchenko**

Professor, Physics; Institute of Solid State Physics (Russia), PhD

**Dmitri Krioukov**

Associate Professor, Physics; Old Dominion University, PhD

**Ganesh Krishnamoorthy**

Professor, Accounting; University of Southern California, PhD

**Karthik Krishnan**

Associate Professor, Finance; Boston College, PhD

**Louis J. Kruger**

Associate Professor, Applied Psychology; Rutgers University, PsyD

**Laura Kuhl**

Assistant Professor, Public Policy and Urban Affairs and International Affairs; Tufts University, PhD

**Abhishek Kumar**

Assistant Teaching Professor, Mechanical and Industrial Engineering; University of Michigan, PhD

**Venkat Kuppuswamy**

Assistant Professor, Entrepreneurship and Innovation; Harvard Business School, DBA

**Jessica Kurr**

Postdoctoral Teaching Associate, Communication Studies; Pennsylvania State University, PhD

**Didem Kurt**

Visiting Associate Professor, Marketing; University of Pittsburgh, PhD

**Kristina Kutsukos**

Assistant Cooperative Education Coordinator, College of Engineering; Northeastern University, MS

**John Kwoka**

Neal F. Finnegan Distinguished Professor, Economics; University of Pennsylvania, PhD

**MiYoung Kwon**

Assistant Professor, Psychology; University of Minnesota, PhD

**Michelle Laboy**

Assistant Professor, Architecture; University of Michigan, MArch

**Jamie Ladge**

Associate Professor, Management and Organizational Development; Boston College, PhD

**Nicole Laffan**

Assistant Clinical Professor, Communication Sciences and Disorders; A.T. Still University, Arizona, PhD

**Jay Laird**

Assistant Teaching Professor, College of Professional Studies; Lesley University, MFA

**Charlotte Lam**

Assistant Cooperative Education Coordinator, College of Science; California State University, Sacramento, MA

**Joan LaMachia**

Senior Cooperative Education Coordinator, College of Social Sciences and Humanities; Boston College, MEd

**Anna Lamin**

Associate Professor, International Business and Strategy; University of Minnesota, PhD

**Jason Lancaster**

Associate Clinical Professor, Pharmacy and Health Systems Sciences; Massachusetts College of Pharmacy, PharmD

**William Lancaster**

Senior Lecturer, Communication Studies; Michigan State University, MA

**Lucas J. Landherr**

Associate Teaching Professor, Chemical Engineering; Cornell University, PhD

**Macayla Landi**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; University of Rhode Island, PhD

**Theodore Landsmark**

Distinguished Professor, Public Policy and Urban Affairs; Boston University, PhD

**David Lang**

Assistant Teaching Professor, Mathematics; Boston College, PhD; Northeastern University, PhD

**Timothy Lannin**

Assistant Teaching Professor, Bioengineering; Cornell University, PhD

**Amy Lantinga**

Teaching Professor, College of Professional Studies; University of Tennessee, EdD

**Philip Larese-Casanova**

Associate Professor, Civil and Environmental Engineering; University of Iowa, PhD

**Sonya L. Larrieux**

Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, PhD

**Krista Larsen**

Visiting Lecturer, Criminology and Criminal Justice; Suffolk University, JD

**Barbara Larson**

Associate Academic Specialist, Management and Organizational Development; Harvard Business School, DBA

**Elizabeth Larson**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Northeastern University, MBA

**Kimberly Larson**

Associate Teaching Professor, College of Professional Studies; Drexel University, PhD

**Felicia G. Lassk**

Associate Professor, Marketing; University of South Florida, PhD

**Amanda Reeser Lawrence**

Associate Professor, Architecture; Harvard University, PhD

**David M. Lazer**

University Distinguished Professor, Political Science and Computer Sciences; University of Michigan, Ann Arbor, PhD

**Ray LC**

Visiting Assistant Professor, Art + Design; University of California, Los Angeles, PhD

**Joshua Lea**

Assistant Clinical Professor, Nursing; Akron University, PhD

**Stefanie E. Leahy**

Assistant Teaching Professor, Law; Pepperdine University, JD

**Sean Leavey**

Visiting Lecturer, Art + Design; Rutgers University, PhD

**Carol Lee**

Assistant Teaching Professor, Supply Chain and Information Management; University of Massachusetts, Boston, PhD

**Cynthia Lee**

Professor, Management and Organizational Development; University of Maryland, PhD

**Doreen Lee**

Associate Professor, Sociology and Anthropology; Cornell University, PhD

**Jung Lee**

Associate Professor, Philosophy and Religion; Brown University, PhD

**Kristen Lee**

Associate Teaching Professor, College of Professional Studies; Northeastern University, EdD

**Lee-Peng Lee**

Assistant Teaching Professor, Mathematics; Massachusetts Institute of Technology, PhD

**Matt Lee**

Teaching Professor, Human Services; University of Illinois, Urbana-Champaign, PhD

**Shun-Yang Lee**

Assistant Professor, Marketing; University of Texas, Austin, PhD

**Yang W. Lee**

Associate Professor, Supply Chain and Information Management; Massachusetts Institute of Technology, PhD

**Carolyn W. T. Lee-Parsons**

Associate Professor, Chemical Engineering and Chemistry and Chemical Biology; Cornell University, PhD

**Chad Lee-Stronach**

Assistant Professor, Philosophy and Religion; Australian National University, PhD

**Miriam E. Leeser**

Professor, Electrical and Computer Engineering; Cambridge University (United Kingdom), PhD

**Laurel Leff**

Associate Professor, Journalism; Yale University, MA

**Lori Lefkowitz**

Ruderman Professor of Jewish Studies, Jewish Studies and English; Brown University, PhD

**Patrick Legros**

Distinguished Professor, Economics; California Institute of Technology, PhD

**Bradley M. Lehman**

Professor, Electrical and Computer Engineering; Georgia Institute of Technology, PhD

**Robert Lentz**

Associate Academic Specialist, Entrepreneurship and Innovation; Babson College, MBA



**Benjamin Lerner**

Assistant Teaching Professor, Computer Sciences; University of Washington, PhD

**Neal Lerner**

Professor, English; Boston University, EdD

**Marina Leslie**

Associate Professor, English; Yale University, PhD

**Laurent Lessard**

Associate Professor, Mechanical and Industrial Engineering; Stanford University, PhD

**Hanoch Lev-Ari**

Professor, Electrical and Computer Engineering; Stanford University, PhD

**Danielle Levac**

Assistant Professor, Physical Therapy, Movement, and Rehabilitation Sciences; McMaster University (Canada), PhD

**Tatyana Levchenko**

Research Assistant Professor, Pharmaceutical Sciences; Academy of Medical Sciences Moscow (Russia), PhD

**Yiannis A. Levendis**

College of Engineering Distinguished Professor, Mechanical and Industrial Engineering; California Institute of Technology, PhD

**Elinor Levine**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; University of Massachusetts, Amherst, MEd

**Erel Levine**

Associate Professor, Bioengineering; Weizmann Institute of Science (Israel), PhD

**Herbert Levine**

University Distinguished Professor, Physics and Bioengineering; Princeton University, PhD

**Kim Lewis**

University Distinguished Professor, Biology; Moscow University (Russia), PhD

**Laura H. Lewis**

University Distinguished Professor, Cabot Professor, Chemical Engineering and Mechanical and Industrial Engineering; University of Texas, Austin, PhD

**Ang Li**

Assistant Professor, Architecture; Princeton University, MArch

**Chieh Li**

Associate Professor, Applied Psychology; University of Massachusetts, Amherst, EdD

**Jiahe Li**

Assistant Professor, Bioengineering; Cornell University, PhD

**Rui Li**

Associate Clinical Professor, Health Sciences; Baylor University, PhD

**Yaning Li**

Associate Professor, Mechanical and Industrial Engineering; University of Michigan, Ann Arbor, PhD

**Zhenyu Liao**

Assistant Professor, Management and Organizational Development; National University of Singapore (Singapore), PhD

**Robert Lieb**

Professor, Supply Chain and Information Management; University of Maryland, DBA

**Karl J. Lieberherr**

Professor, Computer Sciences; Eidgenössische Technische Hochschule Zürich (Switzerland), PhD

**Karin N. Lifter**

Professor, Applied Psychology; Columbia University, PhD

**Xue Lin**

Assistant Professor, Electrical and Computer Engineering; University of Southern California, PhD

**Yingzi Lin**

Professor, Mechanical and Industrial Engineering; University of Saskatchewan (Canada), PhD

**Alisa K. Lincoln**

Professor, Sociology and Anthropology and Health Sciences; Columbia University, PhD

**Katherine Lind**

Postdoctoral Teaching Associate, Communication Studies; Indiana University, PhD

**Margo Lindauer**

Associate Clinical Professor, Law; Georgetown University, JD

**John J. Lindhe**

Associate Teaching Professor, Mathematics; Northeastern University, MA

**Jessica Linker**

Assistant Professor, History; University of Connecticut, PhD

**Gabor P. Lippner**

Associate Professor, Mathematics; Eotvos University (Hungary), PhD

**James Lipsky**

Associate Academic Specialist, American Sign Language; Boston University, MA

**Heather A. Littlefield**

Teaching Professor, Linguistics; Boston University, PhD

**Handan Liu**

Associate Teaching Professor, Graduate School of Engineering; Shanghai Jiao Tong University (China), PhD

**Kelvin Liu**

Associate Professor, Accounting; University of South Carolina, PhD

**Weiling Liu**

Assistant Professor, Finance; Harvard University, PhD

**Xiaoping Liu**

Assistant Teaching Professor, Supply Chain and Information Management; University of Massachusetts, Lowell, PhD

**Yang Liu**

Assistant Professor, Mechanical and Industrial Engineering; Columbia University, PhD

**Yongmin Liu**

Associate Professor, Mechanical and Industrial Engineering and Electrical and Computer Engineering; University of California, Berkeley, PhD

**Ioannis Livanis**

Associate Teaching Professor, International Affairs and Political Science; University of Florida, PhD

**Carol Livermore**

Associate Professor, Mechanical and Industrial Engineering; Harvard University, PhD

**Maidor Llaguno-Munitxa**

Assistant Professor, Architecture; Institute of Technology in Architecture, PhD

**Martha Loftus**

Assistant Teaching Professor, College of Professional Studies; Harvard University, EdD

**Diomedes E. Logothetis**

Professor, Pharmaceutical Sciences; Harvard University, PhD

**Fabrizio Lombardi**

International Test Conference Professor, Electrical and Computer Engineering; University of London (United Kingdom), PhD

**Georgia Looney**

Assistant Cooperative Education Coordinator, College of Engineering; Boston College, MBA

**Melinda Lopez**

Professor of the Practice, Theatre; Boston University, MA

**Steven A. Lopez**

Assistant Professor, Chemistry and Chemical Biology; University of California, Los Angeles, PhD

**Sara Lopez-Pintado**

Professor, Health Sciences; Universidad Carlos III de Madrid (Spain), PhD

**Connie Lorette**

Assistant Clinical Professor, Nursing; Boston College, PhD

**Ralph H. Loring**

Associate Professor, Pharmaceutical Sciences; Cornell University, PhD

**Daniel Lothian**

Visiting Scholar, Journalism; American University, MA

**Kathleen E. Lotterhos**

Assistant Professor, Marine and Environmental Sciences; Florida State University, PhD

**Salim A. Lotuff III**

Teaching Professor, Communication Studies; Northeastern University, MA

**Deirdre Loughridge**

Assistant Professor, Music; University of Pennsylvania, PhD

**Psyche Loui**

Assistant Professor, Music; University of California, Berkeley, PhD

**Jennifer O. Love**

Associate Academic Specialist, Engineering; University of Iowa, MS

**Timothy Love**

Associate Professor, Architecture; Harvard University, MArch

**William Lovely**

Assistant Academic Specialist, International Business and Strategy; Northeastern University, DLP

**Amy Shirong Lu**

Assistant Professor, Communication Studies and Health Sciences; University of North Carolina, Chapel Hill, PhD

**Long Lu**

Assistant Professor, Computer Sciences; Georgia Institute of Technology, PhD

**Lucy Siying Lu**

Assistant Cooperative Education Coordinator, College of Engineering; Harvard Graduate School of Education, MEd

**Mingyang Lu**

Assistant Professor, Bioengineering; Baylor College of Medicine, PhD

**Razvan Lungeanu**

Assistant Professor, Entrepreneurship and Innovation; Northwestern University, PhD

**Katherine Luongo**

Associate Professor, History and International Affairs; University of Michigan, Ann Arbor, PhD

**Steven Lustig**

Associate Professor, Chemical Engineering; Purdue University, PhD

**David E. Luzzi**

Professor, Mechanical and Industrial Engineering; Northwestern University, PhD

**Vasiliki Lykourinou**

Assistant Teaching Professor, Chemistry and Chemical Biology; University of South Florida, PhD

**Jun Ma**

Associate Professor, Economics; University of Washington, PhD

**Kayse Maass**

Assistant Professor, Mechanical and Industrial Engineering; University of Michigan, PhD

**Patricia A. Mabrouk**

Professor, Chemistry and Chemical Biology; Massachusetts Institute of Technology, PhD

**Robin MacIlroy**

Assistant Cooperative Education Coordinator, College of Engineering; Harvard Graduate School of Education, MEd

**Andrew Mackie**

Assistant Clinical Professor, Physician Assistant Program; University of Nebraska, MS

**Jeanne Madden**

Associate Professor, Pharmacy and Health Systems Sciences; Harvard University, PhD

**Kristin Madison**

Professor, Law and Health Sciences; Stanford University, PhD; Yale Law School, JD

**Bala Maheswaran**

Teaching Professor, Engineering; Northeastern University, PhD

**Debra Mahfouz**

Associate Clinical Professor, Pharmacy and Health Systems Sciences; University of Rhode Island, PharmD

**Elizabeth Mahler**

Associate Teaching Professor, College of Professional Studies; George Washington University, EdD

**Luigia Maiellaro**

Teaching Professor, World Languages Center; Russian State University for the Humanities (Russia), PhD

**Jean-Claude Makolo**

Assistant Teaching Professor, Finance; Brandeis University, PhD

**Lee Makowski**

Professor, Bioengineering and Chemistry and Chemical Biology; Massachusetts Institute of Technology, PhD

**Purnima Makris**

Professor, Electrical and Computer Engineering; Massachusetts Institute of Technology, PhD

**Alexandros Makriyannis**

George D. Behrakis Chair and Professor, Center for Drug Discovery and Chemistry and Chemical Biology; University of Kansas, PhD

**Michael Malamas**

Research Associate Professor, Center for Drug Discovery and Chemistry and Chemical Biology; University of Pennsylvania, PhD

**Mario Maletta**

Professor, Accounting; University of Massachusetts, Amherst, PhD

**Shiti Malhotra**

Assistant Teaching Professor, Linguistics; University of Maryland, College Park, PhD

**Veronika Maliborska**

Associate Teaching Professor, College of Professional Studies; Purdue University, PhD

**Andrew Mall**

Assistant Professor, Music; University of Chicago, PhD

**Carol R. Mallory**

Associate Teaching Professor, Law; Northeastern University, JD

**Craig E. Maloney**

Associate Professor, Mechanical and Industrial Engineering; University of California, Santa Barbara, PhD

**Roman Manetsch**

Associate Professor, Chemistry and Chemical Biology and Pharmaceutical Sciences; University of Basel (Switzerland), PhD

**Swapnil Maniar**

Professor of the Practice, Health Sciences; Johns Hopkins University, PhD

**Justin Manjourides**

Assistant Professor, Health Sciences; Harvard University, PhD

**Emily Mann**

Teaching Professor, Human Services; University of Wisconsin, Madison, PhD

**Moira Mannix Votel**

Associate Cooperative Education Coordinator, Bouvé College of Health Sciences; Columbia University, MA

**Peter Manolios**

Professor, Computer Sciences; University of Texas, Austin, PhD

**Valentina Marano**

Assistant Professor, International Business and Strategy; University of South Carolina, PhD

**Janice Maras**

Assistant Teaching Professor, Health Sciences; Northeastern University, EdD

**Krassimir Marchev**

Professor of the Practice, College of Professional Studies; Northeastern University, PhD

**Edwin Marengo Fuentes**

Associate Professor, Electrical and Computer Engineering; Northeastern University, PhD

**Alina Marian**

Professor, Mathematics; Harvard University, PhD

**Tucker Marion**

Associate Professor, Entrepreneurship and Innovation; Pennsylvania State University, PhD

**Helen Markewich**

Assistant Teaching Professor, Bioengineering; Cornell University, PhD

**Robert S. Markiewicz**

Professor, Physics; University of California, Berkeley, PhD

**Alycia Markowski**

Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, DPT

**Joseph Marks**

Associate Teaching Professor, Finance; University of Illinois, Urbana-Champaign, PhD

**Mindy Marks**

Associate Professor, Economics; Washington University, PhD

**Julius Marpaung**

Associate Teaching Professor, Electrical and Computer Engineering; Oklahoma State University, PhD

**Stacy Marsella**

Professor, Computer Sciences and Psychology; Rutgers University, PhD

**Ineke Marshall**

Professor, Sociology and Anthropology and Criminology and Criminal Justice; Bowling Green State University, PhD

**Elizabeth Martin**

Assistant Clinical Professor, Communication Sciences and Disorders; McGill University (Canada), MS

**Dayna L. Martinez**

Assistant Teaching Professor, Mechanical and Industrial Engineering; University of South Florida, Tampa, PhD

**Ramiro Martinez**

Professor, Criminology and Criminal Justice and Sociology and Anthropology; Ohio State University, PhD

**José Angel Martinez-Lorenzo**

Associate Professor, Mechanical and Industrial Engineering and Electrical and Computer Engineering; Universidad de Vigo (Spain), PhD

**Alexander Martsinkovsky**

Associate Professor, Mathematics; Brandeis University, PhD

**David Massey**

Professor, Mathematics; Duke University, PhD

**Jude E. Mathews**

Associate Teaching Professor, Chemistry and Chemical Biology; Clemson University, PhD

**Kay Mathiesen**

Associate Professor, Philosophy and Religion; University of California, Irvine, PhD

**Kristen Mathieu Gonzalez**

Clinical Instructor, Nursing; University of Phoenix, MS

**Daniele Mathras**

Associate Teaching Professor, Marketing; Arizona State University, PhD

**Thomas M. Matta**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; Xavier University of Louisiana, PharmD

**Jonathan Matthis**

Assistant Professor, Biology; Rensselaer Polytechnic University, PhD

**Carla Mattos**

Professor, Chemistry and Chemical Biology; Massachusetts Institute of Technology, PhD

**Lucy Maulsby**

Associate Professor, Architecture; Columbia University, PhD

**Ernest Mauristhene**

Associate Cooperative Education Coordinator, D'Amore-McKim School of Business; Hardin-Simmons University, MBA

**Bruce Maxwell**

Visiting Professor, Computer Sciences; Carnegie Mellon University, PhD

**Jessica Maxwell**

Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Boston University, PhD; Massachusetts General Hospital Institute of Health Professions, DPT

**William Mayer**

Professor, Political Science; Harvard University, PhD

**Mary Mayville**

Assistant Clinical Professor, Nursing; Northeastern University, DNP

**Dori P. Mazor**

Associate Cooperative Education Coordinator, College of Arts, Media and Design; Brandeis University, MBA

**Laurie McCadden**

Clinical Instructor, Nursing; University of Massachusetts, Lowell, MSN

**Paulette McCarty**

Associate Teaching Professor, Management and Organizational Development; University of Tennessee, PhD

**Jane McCool**

Assistant Clinical Professor, Nursing; University of Rhode Island, PhD

**Victoria D. McCoy Dunkley**

Assistant Teaching Professor, Law; Vanderbilt University, JD

**John McDevitt**

Professor of the Practice, Criminology and Criminal Justice and College of Professional Studies; Northeastern University, PhD

**Eileen McDonagh**

Professor, Political Science; Harvard University, PhD

**Ann McDonald**

Associate Professor, Art + Design; Yale University, MFA

**Matthew McDonald**

Associate Professor, Music; Yale University, PhD

**Brianne McDonough**

Assistant Cooperative Education Coordinator, Khoury College of Computer Sciences; Salem State University, MS

**Melissa McElligott**

Associate Teaching Professor, Biology; Northeastern University, PhD

**Kayla McEwen**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Northeastern University, MS

**Nicol E. McGruer**

Professor, Electrical and Computer Engineering; Michigan State University, PhD

**Jean McGuire**

Professor of the Practice, Health Sciences; Brandeis University, PhD

**Hugh McManus**

Associate Teaching Professor, Mechanical and Industrial Engineering; Stanford University, PhD

**Cristine McMartin-Miller**

Associate Teaching Professor, College of Professional Studies; Purdue University, PhD

**Cassandra McMillan**

Assistant Professor, Sociology and Anthropology and Criminology and Criminal Justice; Pennsylvania State University, MA

**Joseph McNabb**

Professor of the Practice, College of Professional Studies; Northeastern University, PhD

**Robert C. McOwen**

Professor, Mathematics; University of California, Berkeley, PhD

**Frances Nelson McSherry**

Teaching Professor, Theatre; New York University, MFA

**Daniel S. Medwed**

University Distinguished Professor, Law; Harvard University, JD

**Iraz Mehdi**

Associate Cooperative Education Coordinator, College of Engineering; California State University, Long Beach, MS

**Emanuel S. Melachrinoudis**

Professor, Mechanical and Industrial Engineering; University of Massachusetts, Amherst, PhD

**Waleed Meleis**

Associate Professor, Electrical and Computer Engineering; University of Michigan, PhD

**Justin Melette**

Visiting Lecturer, English; Pennsylvania State University, PhD

**Susan L. Mello**

Assistant Professor, Communication Studies; University of Pennsylvania, PhD

**Tina J. Mello**

Associate Cooperative Education Coordinator, College of Science; Boston College, MA

**Alice Mello da Fonseca**

Assistant Teaching Professor, College of Professional Studies; Tufts University, PhD

**Richard H. Melloni Jr.**

Professor, Psychology; University of Massachusetts, PhD

**Tommaso Melodia**

William Lincoln Smith Professor of Electrical and Computer Engineering, Electrical and Computer Engineering; Georgia Institute of Technology, PhD

**Michael Meltsner**

Matthews Distinguished University Professor, Law; Yale University, JD

**Jose Menendez**

Postgraduate Teaching Fellow, Art + Design; Rhode Island School of Design, MA

**Latika Menon**

Associate Professor, Physics; Tata Institute of Fundamental Research, Bombay (India), PhD

**Francisco Mesch**

Assistant Cooperative Education Coordinator, Khoury College of Computer Sciences; Washington State University, MS

**Hameed Metghalchi**

Professor, Mechanical and Industrial Engineering; Massachusetts Institute of Technology, ScD

**Laura Meyer**

Assistant Cooperative Education Coordinator, Graduate School of Engineering; Cleveland State University, MEd

**Marc H. Meyer**

Robert J. Shillman Professor of Entrepreneurship and Matthews Distinguished University Professor, Entrepreneurship and Innovation; Massachusetts Institute of Technology, PhD

**Amy Meyers**

Assistant Cooperative Education Coordinator, Computer Sciences; Salem State University, MS

**Ningfang Mi**

Associate Professor, Electrical and Computer Engineering; University of Texas, Dallas, MS

**Vidoje Mihajlovikj**

Lecturer, Computer Sciences; Clarkson University, PhD

**Lara Milane**

Assistant Teaching Professor, Pharmaceutical Sciences; Northeastern University, PhD

**William Miles**

Professor, Political Science; Tufts University, PhD

**Danielle M. Miller**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; Northeastern University, PharmD

**Edward Miller**

Associate Teaching Professor, College of Professional Studies; Boston College, PhD

**Emily Miller**

Assistant Cooperative Education Coordinator, College of Science; New York University, MA

**Matthew Miller**

Professor, Health Sciences; Yale University, MD; Harvard University, ScD

**Maura Miller**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Providence College, BS

**Renee Miller**

Distinguished Professor, Computer Sciences; University of Wisconsin, Madison, PhD

**Ennio Mingolla**

Professor, Communication Sciences and Disorders; University of Connecticut, PhD

**Mona Minkara**

Assistant Professor, Bioengineering; University of Florida, PhD

**Marilyn L. Minus**

Professor, Mechanical and Industrial Engineering; Georgia Institute of Technology, PhD

**Alan Mislove**

Associate Professor, Computer Sciences; Rice University, PhD

**Cheryl Mitteness**

Associate Academic Specialist, Entrepreneurship and Innovation; University of Louisville, PhD

**Nancy Mizzoni**

Clinical Instructor, Nursing; Northeastern University, MS

**Anahit Mkrtchyan**

Assistant Professor, Finance; Pennsylvania State University, PhD

**Sarah Mockler**

Assistant Cooperative Education Coordinator, College of Engineering; Boston College, MA

**Alicia Modestino**

Associate Professor, Public Policy and Urban Affairs and Economics; Harvard University, PhD

**Valentine Moghadam**

Professor, International Affairs; American University, PhD

**Mohsen Moghaddam**

Assistant Professor, Mechanical and Industrial Engineering; Purdue University, PhD

**Shan Mohammed**

Associate Clinical Professor, Health Sciences; Case Western Reserve University, MD

**Alexander C. Moll**

Zelevinsky Research Instructor, Mathematics; Massachusetts Institute of Technology, PhD

**Beth Molnar**

Associate Professor, Health Sciences; Harvard University, ScD

**James Monaghan**

Associate Professor, Biology; University of Kentucky, PhD

**Yasmil Montes**

Assistant Cooperative Education Coordinator, Khoury College of Computer Sciences; Cambridge College, MS

**Robert M. Mooradian**

Professor, Finance; University of Pennsylvania, PhD

**Elizabeth Moore**

Assistant Teaching Professor, International Business and Strategy; Northeastern University, PhD

**Rebekah Moore**

Visiting Assistant Professor, Music; Indiana University, PhD

**Katherine Morelli**

Visiting Assistant Teaching Professor, English; Arizona State University, PhD

**Enrique F. Moreno**

Associate Teaching Professor, Physics; Universidad Nacional de La Plata (Argentina), PhD

**Kimberly Moreno**

Professor, Accounting; University of Massachusetts, Amherst, PhD

**Joanne Morreale**

Associate Professor, Media and Screen Studies; Temple University, PhD

**Mounira Morris**

Assistant Teaching Professor, College of Professional Studies; University of Massachusetts, Amherst, EdD

**Kristen Morse**

Assistant Cooperative Education Coordinator, Bouvé College of Health Sciences; Ithaca College, DPT

**Hossein Mosallaei**

Professor, Electrical and Computer Engineering; University of California, Los Angeles, PhD

**Mohammad Moshref-Javadi**

Visiting Assistant Professor, Supply Chain and Information Management; Purdue University, PhD

**Rashid Mosley**

Assistant Teaching Professor, College of Professional Studies; George Washington University, PhD

**Edward Moss**

Associate Teaching Professor, Writing Program; Emerson College, MFA

**Lorraine Ann Mountain**

Senior Cooperative Education Coordinator, College of Engineering; Tufts University, MS

**Amy Mueller**

Assistant Professor, Civil and Environmental Engineering and Marine and Environmental Sciences; Massachusetts Institute of Technology, PhD

**Sinan Muftu**

Professor, Mechanical and Industrial Engineering; University of Rochester, PhD

**Tania Muino**

Associate Academic Specialist, World Languages Center; University of Barcelona (Spain), MA

**Constantine Mukasa**

Assistant Teaching Professor, Engineering; Florida Atlantic University, PhD

**Sanjeev Mukerjee**

Distinguished Professor, Chemistry and Chemical Biology; Texas AM University, PhD

**Saptarshi Mukherjee**

Assistant Professor, Finance; New York University, PhD

**Jay Mulki**

Associate Professor, Marketing; University of South Florida, PhD

**Anthony Mullen**

Associate Teaching Professor, Computer Sciences; University of Groningen (Netherlands), PhD

**Patrick Mullen**

Associate Professor, English; University of Pittsburgh, PhD

**Seth Mulliken**

Associate Teaching Professor, Media and Screen Studies; North Carolina State University, PhD

**Samuel E. Munoz**

Assistant Professor, Marine and Environmental Sciences and Civil and Environmental Engineering; University of Wisconsin, Madison, PhD

**Kellianne Murphy**

Senior Cooperative Education Coordinator, College of Arts, Media and Design; Northeastern University, MA

**Robert Murray**

Associate Academic Specialist, Supply Chain and Information Management; Harvard Business School, MBA

**Vincent Muscolino**

Lecturer, Finance; Babson College, MBA

**Hande Musdal Ondemir**

Assistant Teaching Professor, Mechanical and Industrial Engineering; Northeastern University, PhD

**Cecelia Musselman**

Associate Teaching Professor, Writing Program; Columbia University, PhD

**Shakir Mustafa**

Teaching Professor, World Languages Center; Boston University, PhD



**Mark Muzere**

Visiting Associate Professor, Finance; Washington University, St. Louis, PhD

**Andrew Myers**

Associate Professor, Civil and Environmental Engineering; Stanford University, PhD

**David Myers**

Associate Teaching Professor, Finance; University of Washington, PhD

**Laura Mylott**

Clinical Professor, Nursing; Boston College, PhD

**Florian Naef**

Zelevinsky Research Instructor, Mathematics; University of Geneva (Switzerland), PhD

**Thomas K. Nakayama**

Professor, Communication Studies; University of Iowa, PhD

**Laurie Nardone**

Associate Teaching Professor, English; Emory University, PhD

**Tareq Nasrallah**

Visiting Assistant Professor, Supply Chain and Information Management; Dakota State University, PhD

**Pran Nath**

Matthews Distinguished University Professor, Physics; Stanford University, PhD

**Hamid Nayeb-Hashemi**

Professor, Mechanical and Industrial Engineering; Massachusetts Institute of Technology, PhD

**Collette Ncube**

Assistant Professor, Health Sciences; University of Pittsburgh, PhD

**Brent Nelson**

Professor, Physics; University of California, Berkeley, PhD

**Carl W. Nelson**

Associate Professor, International Business and Strategy; University of Manchester (United Kingdom), PhD

**Laura Nelson**

Assistant Professor, Sociology and Anthropology; University of California, Berkeley, PhD

**Huy Nguyen**

Assistant Professor, Computer Sciences; Princeton University, PhD

**Julie Nguyen**

Assistant Cooperative Education Coordinator, College of Engineering; Columbia University, MA

**Jared Nicholson**

Associate Clinical Professor, Law; Harvard University, JD

**Sandy Nickel**

Assistant Teaching Professor, College of Professional Studies; University of Iowa, PhD

**Mark J. Niedre**

Associate Professor, Bioengineering; University of Toronto (Canada), PhD

**Spyridon Nikas**

Research Associate Professor, Center for Drug Discovery; Aristotle University (Greece), PhD

**Matthew Nippins**

Assistant Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Massachusetts General Hospital Institute of Health Professions, DPT

**Matthew C. Nisbet**

Professor, Communication Studies; Cornell University, PhD

**Cristina Nita-Rotaru**

Professor, Computer Sciences; Johns Hopkins University, PhD

**Daniel Noemi Voionmaa**

Associate Professor, Cultures, Societies, and Global Studies; Yale University, PhD

**Alison Nogueira**

Senior Cooperative Education Coordinator, College of Engineering; Suffolk University, MEd

**David Nolan**

Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Massachusetts General Hospital Institute of Health Professions, DPT

**Kimberly Nolan**

Associate Teaching Professor, College of Professional Studies; University of Vermont, EdD

**Carey Noland**

Associate Professor, Communication Studies; Ohio University, PhD

**Ellen Noonan**

Associate Teaching Professor, Writing Program; Emerson College, MFA

**Matthew Noonan**

Associate Teaching Professor, Writing Program; Massachusetts College of Art, MFA

**Farzard Noubary**

Associate Clinical Professor, Health Sciences; Harvard University, PhD

**Guevara Noubir**

Professor, Computer Sciences; Swiss Federal Institute of Technology, Lausanne (Switzerland), PhD

**Gilbert Nyaga**

Associate Professor and Joe Dichiacchio Faculty Fellow, Supply Chain and Information Management; Michigan State University, PhD

**Jessica Oakes**

Assistant Professor, Bioengineering; University of California, San Diego, PhD

**Antonio Ocampo-Guzman**

Associate Professor, Theatre; York University (Canada), MFA

**Abigail Ochengco**

Assistant Cooperative Education Coordinator, College of Engineering; Harvard University, MEd

**Curtis Odom**

Assistant Teaching Professor, Management and Organizational Development; Pepperdine University, EdD

**Mikhail Oet**

Associate Teaching Professor, College of Professional Studies; Case Western Reserve University, PhD

**Dietmar Offenhuber**

Associate Professor, Art + Design and Public Policy and Urban Affairs; Massachusetts Institute of Technology, PhD

**Marvin Onabajo**

Associate Professor, Electrical and Computer Engineering; Texas AM University, PhD

**Mary Jo Ondrechen**

Professor, Chemistry and Chemical Biology; Northwestern University, PhD

**Annalisa Onnis-Hayden**

Teaching Professor, Civil and Environmental Engineering; University of Cagliari (Italy), PhD

**Alina Oprea**

Associate Professor, Computer Sciences; Carnegie Mellon University, PhD

**Toyoko J. Orimoto**

Associate Professor, Physics; University of California, Berkeley, PhD

**Jessica Ormsby**

Assistant Cooperative Education Coordinator, College of Engineering; University of Massachusetts, Boston, MEd

**Andrew Orr-Skirvin**

Associate Clinical Professor, Pharmacy and Health Systems Sciences; University of Texas, Austin, PharmD

**Sarah Ostadabbas**

Assistant Professor, Electrical and Computer Engineering; University of Texas, Dallas, PhD

**Timothy Ouillette**

Associate Teaching Professor, Communication Studies; Art Institute of Boston, MFA

**Jane Owens**

Associate Professor, Pharmacy and Health Systems Sciences; Pennsylvania State University, PhD

**Oyindasola O. Oyelaran**

Teaching Professor, Chemistry and Chemical Biology; Harvard University, PhD

**Yusuf Ozbek**

Associate Teaching Professor, Graduate School of Engineering; Northeastern University, PhD

**Daniel O'Brien**

Associate Professor, Public Policy and Urban Affairs and Criminology and Criminal Justice; Binghamton University, PhD

**Brian O'Connell**

Assistant Teaching Professor, Engineering; Tufts University, PhD

**Sean O'Connell**

Assistant Academic Specialist, College of Professional Studies; Northeastern University, PhD

**Catherine O'Connor**

Clinical Instructor, Nursing; Boston College, MS

**George A. O'Doherty**

Professor, Chemistry and Chemical Biology; Ohio State University, PhD

**Russ O'Haver**

Senior Academic Specialist, Accounting; University of New York, PhD

**Peggy L. O'Kelly**

Principal Lecturer, Accounting; University of Michigan, MBA

**Donald M. O'Malley**

Associate Professor, Biology; Harvard University, PhD

**Donica O'Malley**

Postdoctoral Teaching Associate, Communication Studies; University of Pittsburgh, PhD

**Therese M. O'Neil-Pirozzi**

Associate Professor, Communication Sciences and Disorders; Boston University, ScD

**Taskin Padir**

Associate Professor, Electrical and Computer Engineering; Purdue University, PhD

**Robert K. Painter**

Associate Teaching Professor, Linguistics; State University of New York, Buffalo, PhD

**Himlona Palikhe**

Associate Teaching Professor, Graduate School of Engineering; Texas Tech University, PhD

**Costas Panagopoulos**

Professor, Political Science; New York University, PhD

**Kwamina Panford**

Associate Professor, Cultures, Societies, and Global Studies; Northeastern University, PhD

**Themis Papageorge**

Associate Clinical Professor, Computer Sciences; Massachusetts Institute of Technology, PhD

**Demetra Paparounas**

Lecturer, Supply Chain and Information Management; Northeastern University, PhD

**Harikrishnan Parameswaran**

Assistant Professor, Bioengineering; Boston University, PhD

**Serena Parekh McGushin**

Associate Professor, Philosophy and Religion; Boston College, PhD

**Jason Parente**

Assistant Clinical Professor, Physician Assistant Program; Northeastern University, MS

**Melissa Parenti**

Assistant Teaching Professor, College of Professional Studies; University of Southern California, EdD

**Chanhyun Park**

Assistant Professor, Pharmacy and Health Systems Sciences; University of Texas, Austin, PhD

**John Park**

Clinical Instructor, Computer Sciences; Stanford University, MS

**Quannah Parker-McGowan**

Assistant Teaching Professor, College of Professional Studies; University of Minnesota, PhD

**Wendy E. Parmet**

Matthews Distinguished University Professor, Law; Harvard University, JD

**Christopher Parsons**

Associate Professor, History; University of Toronto (Canada), PhD

**Nikos Passas**

Professor, Criminology and Criminal Justice; University of Edinburgh (Scotland), PhD

**Rupal Patel**

Professor, Communication Sciences and Disorders and Computer Sciences; University of Toronto (Canada), PhD

**Dipu Patel-Junankar**

Assistant Clinical Professor, Physician Assistant Program; University of Nebraska, MPAS

**Mark R. Patterson**

Professor, Marine and Environmental Sciences and Civil and Environmental Engineering; Harvard University, PhD

**Jeremy R. Paul**

Professor, Law; Harvard University, JD

**Koen Pauwels**

Distinguished Professor, Marketing; University of California, Los Angeles, PhD

**Michael Pavel**

Professor of the Practice, Computer Sciences and Health Sciences; New York University, PhD

**Spiro Pavlopoulos**

Research Associate Professor, Center for Drug Discovery; Victorian College of Pharmacy, Melbourne (Australia), PhD

**Virgiliu Pavlu**

Associate Teaching Professor, Computer Sciences; Northeastern University, PhD

**Kara Pavone**

Assistant Professor, Nursing; University of Pennsylvania, PhD

**Karen Pawelek**

Assistant Clinical Professor, Nursing; Northeastern University, PhD

**Nancy Pawlyshyn**

Associate Teaching Professor, College of Professional Studies; Capella University, PhD

**Sarah Peacock**

Assistant Teaching Professor, Biology; University of Missouri Medical School, PhD

**Celia Pearce**

Associate Professor, Game Design; University of the Arts London (United Kingdom), PhD

**Neal J. Pearlmutter**

Associate Professor, Psychology; Massachusetts Institute of Technology, PhD

**Melissa Pearson**

Assistant Teaching Professor, Writing Program; University of South Carolina, PhD

**Alyssa Peckham**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; University of Rhode Island, PhD

**Jinxiang Pei**

Assistant Teaching Professor, Mechanical and Industrial Engineering; Northwestern University, PhD

**Lei Pei**

Assistant Professor, Marketing; University of California, Los Angeles, PhD

**Melissa Peiken**

Associate Cooperative Education Coordinator, Khoury College of Computer Sciences; Emerson College, MEd

**Matej Penciak**

Zelevinsky Research Instructor, Mathematics; University of Illinois, Urbana-Champaign, PhD

**Russell Pensyl**

Professor, Art + Design; Western Michigan University, MFA

**Diane Perez**

Assistant Academic Specialist, College of Professional Studies; Salem State University, MEd

**Laura Perovich**

Assistant Professor, Art + Design; Massachusetts Institute of Technology, PhD

**Ivan Petkov**

Assistant Professor, Economics; Boston College, PhD

**Courtney Pfluger**

Assistant Teaching Professor, Chemical Engineering; Northeastern University, PhD

**David M. Phillips**

Professor, Law; Columbia University, JD

**Susan E. Picillo**

Senior Lecturer, Communication Studies; Cambridge College, MEd

**Kelsey Pieper**

Assistant Professor, Civil and Environmental Engineering; Virginia Polytechnic Institute and State University, PhD

**Sara Pintado-Lopez**

Associate Professor, Health Sciences; Universidad Carlos III de Madrid (Spain), PhD

**Ameet Pinto**

Assistant Professor, Civil and Environmental Engineering; Virginia Polytechnic Institute and State University, PhD

**Maricla Pirozzi**

Assistant Cooperative Education Coordinator, Graduate School of Engineering; European School of Economics (Italy), MBA

**Leigh Plant**

Research Associate Professor, Pharmaceutical Sciences; University of Leeds (United Kingdom), PhD

**Harlan D. Platt**

Professor, Finance; University of Michigan, PhD

**Marjorie Platt**

Professor, Accounting; University of Michigan, PhD

**Robert Platt Jr.**

Assistant Professor, Computer Sciences; University of Massachusetts, Amherst, PhD

**Mya Poe**

Associate Professor, English; University of Massachusetts, Amherst, PhD

**Hermine Poghosyan**

Assistant Professor, Nursing; University of Massachusetts, Boston, PhD

**Ann Polcari**

Associate Clinical Professor, Nursing; Boston College, PhD

**Stephanie Pollack**

Professor of the Practice, Public Policy and Urban Affairs; Harvard Law School, JD

**Michael P. Pollastri**

Professor, Chemistry and Chemical Biology; Brown University, PhD

**Marius Popescu**

Associate Teaching Professor, Finance; Virginia Polytechnic Institute and State University, PhD

**Hilary Poriss**

Associate Professor, Music; University of Chicago, PhD

**Gary Porter**

Assistant Teaching Professor, Finance; University of South Carolina, PhD

**Richard D. Porter**

Professor, Mathematics; Yale University, PhD

**Veronica L. Porter**

Associate Professor, Cooperative Education, College of Science; Northeastern University, MEd

**Lindsay Portnoy**

Associate Teaching Professor, College of Professional Studies; Fordham University, PhD

**John Portz**

Professor, Political Science; University of Wisconsin, Madison, PhD

**Mary-Susan Potts-Santone**

Teaching Professor, Biology; University of New Hampshire, PhD

**Michael J. Power**

Lecturer, Supply Chain and Information Management; Northeastern University, MBA

**Edward Powers**

Professor of the Practice, College of Professional Studies; Northeastern University, EdD

**Susan G. Powers-Lee**

Professor, Biology; University of California, Berkeley, PhD

**Silvia Prina**

Associate Professor, Economics; Boston University, PhD

**Robert Prior**

Associate Teaching Professor, College of Professional Studies; Nova Southeastern University, EdD

**Mark Prokosch**

Associate Teaching Professor, Psychology; University of California, Davis, PhD

**Sheila M. Puffer**

Professor and University Distinguished Professor, International Business and Strategy; University of California, Berkeley, PhD

**Zhenyun Qian**

Research Assistant Professor, Electrical and Computer Engineering; Northeastern University, PhD

**Karen Quigley**

Professor, Psychology; Ohio State University, PhD

**Simon Rabinovitch**

Associate Professor, History and Jewish Studies; Brandeis University, PhD

**Gordana Rabrenovic**

Associate Professor, Sociology and Anthropology; State University of New York, Albany, PhD

**John Rachlin**

Assistant Teaching Professor, Computer Sciences; Boston University, PhD

**Srinivasan Radhakrishnan**

Assistant Teaching Professor, Mechanical and Industrial Engineering; Northeastern University, PhD

**Predrag Radivojac**

Professor, Computer Sciences; Temple University, PhD

**Stephanie Raible**

Assistant Teaching Professor, Entrepreneurship and Innovation; Northeastern University, EdD

**Rajmohan Rajaraman**

Professor, Computer Sciences; University of Texas, Austin, PhD

**Ravi Ramamurti**

University Distinguished Chair Professor, International Business and Strategy; Harvard University, DBA

**Valeria Ramdin**

Assistant Clinical Professor, Nursing; Northeastern University, DNSc

**Alireza Ramezani**

Assistant Professor, Electrical and Computer Engineering; University of Michigan, PhD

**Deborah A. Ramirez**

Professor, Law; Harvard University, JD

**Sumientra Rampersad**

Research Assistant Professor, Electrical and Computer Engineering; Radboud University (Netherlands), PhD

**Janet Randall**

Professor, English; University of Massachusetts, Amherst, PhD

**Aanjhan Ranganathan**

Assistant Professor, Computer Sciences; ETH Zurich (Switzerland), PhD

**Manish Ranjit**

Assistant Teaching Professor, Mechanical and Industrial Engineering; Texas Tech University, PhD

**Carey M. Rappaport**

College of Engineering Distinguished Professor, Electrical and Computer Engineering; Massachusetts Institute of Technology, ScD

**K.J. Rawson**

Associate Professor, English and Women's, Gender, and Sexuality Studies; Syracuse University, PhD

**Andrea Raynor**

Teaching Professor, Art + Design; School of Visual Arts, MFA

**Desislava Raytcheva**

Associate Teaching Professor, Biology; Northeastern University, PhD

**Leena Razzaq**

Assistant Teaching Professor, Computer Sciences; Worcester Polytechnic Institute, PhD

**Joseph Reagle**

Associate Professor, Communication Studies; New York University, PhD

**Lynn Reede**

Associate Clinical Professor, Nursing; Northeastern University, PhD

**Debra J. Reid**

Associate Clinical Professor, Pharmacy and Health Systems Sciences; Northeastern University, PharmD

**Imke Reimers**

Assistant Professor, Economics; University of Minnesota, PhD

**Karen Reiss Medwed**

Associate Teaching Professor, College of Professional Studies; New York University, PhD

**Marketa Rejtar**

Assistant Clinical Professor, Nursing; Massachusetts General Hospital Institute of Health Professions, PhD

**John R. Reynolds**

Professor, Pharmacy and Health Systems Sciences; Duquesne University, PharmD

**Lesley A. Ricci**

Associate Teaching Professor, Psychology; Northeastern University, PhD

**Milda Richardson**

Associate Teaching Professor, Art + Design; Boston University, PhD

**Megan Richmond**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Boston College, MEd

**Janet S. Rico**

Associate Clinical Professor, Nursing; Northeastern University, PhD

**Mirek Riedewald**

Associate Professor, Computer Sciences; University of California, Santa Barbara, PhD

**Christoph Riedl**

Associate Professor, Supply Chain and Information Management and Computer Sciences; Technische Universität München (Germany), PhD

**Justin B. Ries**

Professor, Marine and Environmental Sciences; Johns Hopkins University, PhD

**Matteo Rinaldi**

Associate Professor, Electrical and Computer Engineering; University of Pennsylvania, PhD

**Christie Rizzo**

Assistant Professor, Applied Psychology; University of Southern California, Los Angeles, PhD

**Christina Roberts**

Associate Cooperative Education Coordinator, D'Amore-McKim School of Business; Simmons College, MBA

**Christopher J. Robertson**

Professor, International Business and Strategy; Florida State University, PhD

**Craig M. Robertson**

Associate Professor, Media and Screen Studies; University of Illinois, Urbana-Champaign, PhD

**William Robertson**

Associate Professor, Computer Sciences and Electrical and Computer Engineering; University of California, Santa Barbara, PhD

**Hilary C. Robinson**

Associate Professor, Law and Sociology and Anthropology; Massachusetts Institute of Technology, PhD; Harvard University, JD

**Tracy L. Robinson Wood**

Professor, Applied Psychology; Harvard University, EdD

**Brian Robison**

Assistant Teaching Professor, Music; Cornell University, DMA

**David Rochefort**

Distinguished Professor, Political Science; Brown University, PhD

**Rachel Rodgers**

Associate Professor, Applied Psychology; Université de Toulouse-Le Mirail (France), PhD

**Kirsten Rodine Hardy**

Associate Professor, Political Science; University of California, Berkeley, PhD

**Rudy Rodsphon**

Zelevinsky Research Instructor, Mathematics; Université Lyon 1 (France), PhD

**Sonia Rolland**

Professor, Law; Cambridge University (United Kingdom), PhD; University of Michigan, JD

**Bruce Ronkin**

Professor, Music; University of Maryland, DMA

**Tayla Rose**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; University of Connecticut, PharmD

**Rachel E. Rosenbloom**

Professor, Law; New York University, JD

**Rebeca B. Rosengaus**

Associate Professor, Marine and Environmental Sciences; Boston University, PhD

**James R. Ross**

Associate Professor, Journalism; American University, MA

**Aaron Roth**

Associate Teaching Professor, Biology; Northeastern University, PhD

**Alexandra Roth**

Associate Academic Specialist, International Business and Strategy; University of Frankfurt (Germany), PhD

**Sara Rouhanifard**

Assistant Professor, Bioengineering; Yeshiva University, PhD

**James V. Rowan**

Professor, Law; Duke University, JD

**Jeffrey W. Ruberti**

Professor, Bioengineering; Tulane University, PhD

**Michael Ruff**

Assistant Teaching Professor, Accounting; Bentley University, PhD

**Timothy J. Rupert**

Professor, Accounting; Pennsylvania State University, PhD

**Ivan Rupnik**

Associate Professor, Architecture; Harvard University, PhD

**Elizabeth Russet**

Assistant Clinical Professor, Nursing; Northeastern University, PhD

**Hanai Sadaka**

Associate Teaching Professor, Mathematics; Northeastern University, PhD

**J. Timothy Sage**

Associate Professor, Physics; University of Illinois, Urbana-Champaign, PhD

**Bhawesh Sah**

Visiting Assistant Professor, Supply Chain and Information Management; State University of New York, Binghamton, PhD

**Vinod Sahney**

University Distinguished Professor, Mechanical and Industrial Engineering; University of Wisconsin, Madison, PhD

**Blaine Saito**

Assistant Professor, Law; Harvard University, JD

**Iman Salama**

Associate Teaching Professor, Electrical and Computer Engineering; Virginia Polytechnic Institute and State University, PhD

**Masoud Salehi**

Associate Professor, Electrical and Computer Engineering; Stanford University, PhD

**Carmel Salhi**

Assistant Professor, Health Sciences; Harvard University, PhD

**William Sanchez**

Associate Professor, Applied Psychology; Boston University, PhD

**Nada Sanders**

Distinguished Professor of Supply Chain Management, Supply Chain and Information Management; Ohio State University, PhD

**Tova Sanders**

Associate Teaching Professor, College of Professional Studies; George Washington University, EdD

**Ronald Sandler**

Professor, Philosophy and Religion; University of Wisconsin, Madison, PhD

**Erica Sands**

Assistant Cooperative Education Coordinator, D'Amore-McKim School of Business; Northeastern University, MS

**John Sangster**

Assistant Teaching Professor, Engineering; Virginia Polytechnic Institute and State University, PhD

**Claudia Santelices**

Research Assistant Professor, Institute of Health Equity and Social Justice Research Center; University of Connecticut, PhD

**Jody Santos**

Visiting Assistant Teaching Professor, Journalism; Northeastern University, MA

**Ravi Sarathy**

Professor, International Business and Strategy; University of Michigan, PhD

**Mehrdad Sasani**

Professor, Civil and Environmental Engineering; University of California, Berkeley, PhD

**Ajay B. Satpute**

Assistant Professor, Psychology; University of California, Los Angeles, PhD

**Behrooz (Barry) Satvat**

Associate Teaching Professor, Chemical Engineering; Massachusetts Institute of Technology, ScD

**Stephen S. Savitsky**

Assistant Cooperative Education Coordinator, College of Science; Marquette University, MA

**Kevin Scanlon**

Professor of the Practice, Entrepreneurship and Innovation; University of London (United Kingdom), PhD

**Samuel V. Scarpino**

Assistant Professor, Marine and Environmental Sciences and Physics; University of Texas, Austin, PhD

**Carmen Sceppa**

Professor, Health Sciences; Francisco Marroquin University (Guatemala), MD; Tufts University, PhD

**Martin Schedlbauer**

Associate Clinical Professor, Computer Sciences; University of Massachusetts, PhD

**Gunar Schirner**

Associate Professor, Electrical and Computer Engineering; University of California, Irvine, PhD



**Ralf W. Schlosser**

Professor, Communication Sciences and Disorders; Purdue University, PhD

**Walter Schnyder**

Associate Teaching Professor, Computer Sciences; Swiss Federal Institute of Technology (Switzerland), PhD

**Egon Schulte**

Professor, Mathematics; University of Dortmund (Germany), PhD

**Kathryn Schulte Grahame**

Associate Teaching Professor, Engineering; Columbia University, PhD

**Joseph Schwartz**

Associate Teaching Professor, Communication Studies; University of Iowa, PhD

**Martin Schwarz Jr.**

Associate Professor, Mathematics; Courant Institute, PhD

**Cody Scott**

Assistant Professor, Computer Sciences; University of Maryland, PhD

**Douglass Scott**

Associate Teaching Professor, Art + Design; Yale University, MFA

**Steven Scyphers**

Assistant Professor, Marine and Environmental Sciences; University of South Alabama, PhD

**Max Sederer**

Assistant Cooperative Education Coordinator, College of Engineering; Tufts University, MEd

**Magy Seif El-Nasr**

Associate Professor, Computer Sciences and Art + Design; Northeastern University, PhD

**Ethan Selinger**

Assistant Cooperative Education Coordinator, Khoury College of Computer Sciences; University of Massachusetts, Lowell, MS

**Sarah Sellke**

Assistant Teaching Professor, Computer Sciences; Purdue University, PhD

**Shubhro Sen**

Visiting Professor, Marketing; University of California, Berkeley, PhD

**Laura Senier**

Associate Professor, Sociology and Anthropology and Health Sciences; Brown University, PhD

**Sumi Seo**

Assistant Teaching Professor, Mathematics; University of Missouri, Columbia, PhD

**Bahram Shafai**

Professor, Electrical and Computer Engineering; George Washington University, ScD

**Michael Shah**

Lecturer, Computer Sciences; Tufts University, PhD

**Rebecca M. Shansky**

Associate Professor, Psychology; Yale University, PhD

**Harvey Shapiro**

Clinical Professor, College of Professional Studies; Hebrew Union College, PhD

**Ali Sharifkhani**

Assistant Professor, Finance; University of Toronto (Canada), PhD

**William T. Sharp**

Associate Teaching Professor, Psychology; Boston Graduate School of Psychoanalysis, PhD

**Gavin M. Shatkin**

Professor, Public Policy and Urban Affairs and Architecture; Rutgers University, PhD

**Dennis R. Shaughnessy**

Senior Academic Specialist, Entrepreneurship and Innovation; University of Maryland, JD

**Margaret Shea**

Associate Cooperative Education Coordinator, D'Amore-McKim School of Business; Boston University, BLS

**Thomas C. Sheahan**

Professor, Civil and Environmental Engineering; Massachusetts Institute of Technology, ScD

**Sandra Shefelbine**

Professor, Mechanical and Industrial Engineering and Bioengineering; Stanford University, PhD

**Abhi Shelat**

Associate Professor, Computer Sciences; Massachusetts Institute of Technology, PhD

**Paxton Sheldahl**

Assistant Teaching Professor, Architecture; Harvard University, MArch

**H. David Sherman**

Professor, Accounting; Harvard University, DBA

**Amit Shesh**

Associate Teaching Professor, Computer Sciences; University of Minnesota, Twin Cities, PhD

**Shiaoming Shi**

Assistant Teaching Professor, Bioengineering; University of Pittsburgh, PhD

**Craig Shillaber**

Assistant Teaching Professor, Civil and Environmental Engineering; Virginia Polytechnic Institute and State University, MS

**Ji-Yong Shin**

Assistant Professor, Computer Sciences; Cornell University, PhD

**Jennifer Shire**

Assistant Cooperative Education Coordinator, Khoury College of Computer Sciences; Columbia University, MBA

**Olin Shivers**

Professor, Computer Sciences; Carnegie Mellon University, PhD

**Mariya Shiyko**

Associate Professor, Applied Psychology; City University of New York, PhD

**Katy Shorey**

Assistant Teaching Professor, Philosophy and Religion; University of Missouri, PhD

**Catherine Showalter**

Assistant Teaching Professor, College of Professional Studies; University of Utah, PhD

**Aatmesh Shrivastava**

Assistant Professor, Electrical and Computer Engineering; University of Virginia, Charlottesville, PhD

**Milad Siami**

Assistant Professor, Electrical and Computer Engineering; Lehigh University, PhD

**Stephanie Sibicky**

Assistant Clinical Professor, Pharmacy and Health Systems Sciences; University of Rhode Island, PhD

**Brandon Sichling**

Assistant Teaching Professor, Art + Design; Emerson College, MFA

**Mary Lou Siefert**

Associate Clinical Professor, Nursing; Yale University, PhD

**Jose Sierra**

Associate Teaching Professor, Computer Sciences; Universidad Carlos III de Madrid (Spain), PhD

**Robert Sikes**

Associate Professor, Physical Therapy, Movement, and Rehabilitation Sciences; University of Texas, Houston, PhD

**Jessica M. Silbey**

Professor, Law; University of Michigan, PhD, JD

**Michael B. Silevitch**

Robert Black Professor of Engineering and College of Engineering Distinguished Professor, Electrical and Computer Engineering; Northeastern University, PhD

**Robert A. Silversmith**

Zelevinsky Research Instructor, Mathematics; University of Michigan, PhD

**Peter Simon**

Teaching Professor, Economics; Northern Illinois University, PhD

**Simon Singer**

Professor, Criminology and Criminal Justice; University of Pennsylvania, PhD

**Hanumant Singh**

Professor, Electrical and Computer Engineering and Mechanical and Industrial Engineering; Massachusetts Institute of Technology, PhD

**Rifat Sipahi**

Professor, Mechanical and Industrial Engineering; University of Connecticut, PhD

**Michail V. Sitkovsky**

Eleanor W. Black Chair in Immunophysiology and Pharmaceutical Biotechnology and Professor, Institute for Tissue Damage and Biology; Moscow State University (Russia), PhD

**Mark Sivak**

Associate Teaching Professor, Art + Design and Engineering; Northeastern University, PhD

**Hazel Sive**

Professor, Biology; Rockefeller University, PhD

**Louise A. Skinnari**

Assistant Professor, Physics; University of California, Berkeley, PhD

**Adrienne Slaughter**

Lecturer, Computer Sciences; University of Washington, PhD

**Nikolai Slavov**

Assistant Professor, Bioengineering; Princeton University, PhD

**Rory Smead**

Ronald L. and Linda A. Rossetti Professor for the Humanities, Philosophy and Religion; University of California, Irvine, PhD

**Daryl Smith**

Visiting Assistant Teaching Professor, Art + Design; Rhode Island School of Design, MFA

**David A. Smith**

Assistant Professor, Computer Sciences; Johns Hopkins University, PhD

**Henry Smith**

Assistant Teaching Professor, Physics; Northeastern University, PhD

**Keith Smith**

Assistant Professor, Marketing; University of Georgia, PhD

**Matthew Smith**

Associate Professor, Philosophy and Religion; University of North Carolina, Chapel Hill, PhD

**Molly Smith**

Assistant Teaching Professor, College of Professional Studies; Boston College, PhD

**Ronald Bruce Smith**

Associate Professor, Music; University of California, Berkeley, PhD

**Wendy A. Smith**

College of Arts and Sciences Distinguished Professor, Biology; Duke University, PhD

**Eugene S. Smotkin**

Professor, Chemistry and Chemical Biology; University of Texas, Austin, PhD

**Bridget Smyser**

Associate Teaching Professor, Mechanical and Industrial Engineering; Worcester Polytechnic Institute, PhD

**Nancy P. Snyder**

Associate Teaching Professor, Psychology; Harvard University, EdD

**Dani Snyder-Young**

Assistant Professor, Theatre; New State University, PhD

**Isabel Sobral Campos**

Assistant Teaching Professor, English; City University of New York, PhD

**Claudia Sokol**

Associate Teaching Professor, World Languages Center; University of Buenos Aires (Argentina), MD

**Eduardo Sontag**

University Distinguished Professor, Electrical and Computer Engineering and Bioengineering; University of Florida, PhD

**Maria Sorenson**

Visiting Clinical Instructor, Nursing; Northeastern University, MSN

**Nikolaos S. Soukos**

Associate Teaching Professor, Physics and Biology; University of Munich (Germany), PhD

**Bert A. Spector**

Associate Professor, International Business and Strategy; University of Missouri, PhD

**Denise Spencer**

Senior Lecturer, Supply Chain and Information Management; Boston College, PhD

**Emily A. Spieler**

Edwin W. Hadley Professor, Law; Yale University, JD

**Karen M. Spikes**

Assistant Teaching Professor, Psychology; Cornell University, PhD

**Jay Spitulnik**

Associate Teaching Professor, Computer Sciences and Health Sciences; Walden University, PhD

**Bryan Q. Spring**

Assistant Professor, Physics; University of Illinois, Urbana-Champaign, PhD

**Shelia Springer**

Postdoctoral Teaching Associate, Communication Studies; University of Arizona, PhD

**Srinivas Sridhar**

University Distinguished Professor, Physics; California Institute of Technology, PhD

**Kuppuswamy Srikrishna**

Associate Teaching Professor, Entrepreneurship and Innovation; University of California, Berkeley, PhD

**Kandarp Srinivasan**

Assistant Professor, Finance; Washington University, St. Louis, PhD

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Visiting Lecturer, Public Policy and Urban Affairs; University of Delaware, PhD

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**Dagmar Sternad**

University Distinguished Professor, Biology and Electrical and Computer Engineering; University of Connecticut, PhD

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Professor, Electrical and Computer Engineering; Northeastern University, PhD

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Assistant Professor, Electrical and Computer Engineering; University of Illinois, Urbana-Champaign, PhD

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Professor, Chemical Engineering; Northwestern University, PhD

**Fernando Suarez**

Jean C. Tempel Professor, Entrepreneurship and Innovation; Massachusetts Institute of Technology, PhD

**Alexandru I. Suci**

Professor, Mathematics; Columbia University, PhD

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**Hao Sun**

Assistant Professor, Civil and Environmental Engineering; Columbia University, PhD

**Hongwei Sun**

Professor, Mechanical and Industrial Engineering; Chinese Academy of Sciences (China), PhD

**Nian-Xiang Sun**

Professor, Electrical and Computer Engineering; Stanford University, PhD

**Ravi Sundaram**

Professor, Computer Sciences; Massachusetts Institute of Technology, PhD

**Daniel Sunderland**

Professor of the Practice, Accounting; University of Chicago, MBA

**Alexander Susienka**

Assistant Cooperative Education Coordinator, College of Science; Western Michigan University, MA

**Gloria Sutton**

Associate Professor, Art + Design; University of California, Los Angeles, PhD

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Professor, Law; Harvard University, PhD; University of California, Berkeley, JD

**Richard S. Swasey Jr.**

Principal Lecturer, Finance; University of Virginia, MBA

**Jacqueline F. Sweeney**

Senior Cooperative Education Coordinator, College of Arts, Media and Design; Northeastern University, MS

**Meredith O. Sweeney**

Assistant Teaching Professor, Biology; Brandeis University, PhD

**Nina Sylvanus**

Associate Professor, Sociology and Anthropology; Ecole des Hautes Etudes en Sciences Sociales, Paris (France), PhD

**Balazs Szelenyi**

Associate Teaching Professor, College of Professional Studies; University of California, Los Angeles, PhD

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Dennis Picard Trustee Professor, Electrical and Computer Engineering; University of Washington, PhD

**Srinivas Tadigadapa**

Professor, Electrical and Computer Engineering; Cambridge University (United Kingdom), PhD

**Paul Tagliamonte**

Lecturer, Supply Chain and Information Management; Boston College, MS

**David Tamés**

Associate Teaching Professor, Art + Design; Massachusetts College of Art and Design, MFA

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Assistant Professor, Mechanical and Industrial Engineering; Princeton University, PhD

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Assistant Teaching Professor, Supply Chain and Information Management; University of Connecticut, PhD

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Professor, Physics; University of Warsaw (Poland), PhD

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**Kate Terrado**

Visiting Assistant Teaching Professor, Art + Design; Northeastern University, MFA

**Philip Thai**

Associate Professor, History; Stanford University, PhD

**Ganesh Thakur**

Associate Professor, Pharmaceutical Sciences; Institute of Chemical Technology (India), PhD

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Associate Clinical Professor, Physical Therapy, Movement, and Rehabilitation Sciences; Northeastern University, PhD

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Associate Teaching Professor, College of Professional Studies; University of North Carolina, Chapel Hill, PhD

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Associate Academic Specialist, World Languages Center; University of Washington, MA

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Associate Professor, Cultures, Societies, and Global Studies; University of Helsinki (Finland), PhD

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Professor, Mechanical and Industrial Engineering; University of Maryland, College Park, PhD

**He Wang**

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**Lu Wang**

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**Ming Wang**

College of Engineering Distinguished Professor, Civil and Environmental Engineering; University of New Mexico, PhD

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**Nikki Weichum**

Postdoctoral Teaching Associate, Communication Studies; University of Illinois, Urbana-Champaign, PhD

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Assistant Professor, Computer Sciences; University of California, Santa Barbara, PhD

**Sheila Winborne**

Associate Teaching Professor, Philosophy and Religion; Harvard University, PhD

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Assistant Cooperative Education Coordinator, College of Social Sciences and Humanities; Northeastern University, MS

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Professor, Supply Chain and Information Management; Cornell University, PhD

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Assistant Teaching Professor, College of Professional Studies; United States Sports Academy, EdD

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Associate Teaching Professor, College of Professional Studies; Columbia University, EdD

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Senior Cooperative Education Coordinator, College of Social Sciences and Humanities; Bridgewater State College, MEd

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Clinical Instructor, Communication Sciences and Disorders; University of Pittsburgh, MA

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**Nizar Zaarour**

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Assistant Teaching Professor, English; Lynch School of Education, Boston College, PhD

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**Yi Zheng**

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**Xiaomu Zhou**

Assistant Teaching Professor, College of Professional Studies; University of Michigan, PhD

**Zhaohui S. Zhou**

Professor, Chemistry and Chemical Biology; Scripps Research Institute, PhD

**Hongli Zhu**

Assistant Professor, Mechanical and Industrial Engineering; South China University of Technology (China), PhD

**Xuwen Zhu**

Assistant Professor, Mathematics; Massachusetts Institute of Technology, PhD

**Sali Ziane**

Teaching Professor, World Languages Center; University of Paris XIII (France), PhD

**Nathanial Ziegler**

Associate Cooperative Education Coordinator, College of Engineering; Indiana University of Pennsylvania, MEd

**Katherine S. Ziemer**

Professor, Chemical Engineering; West Virginia University, PhD

**Emily Zimmerman**

Assistant Professor, Communication Sciences and Disorders; University of Kansas, PhD

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Associate Professor, Criminology and Criminal Justice; State University of New York, Albany, PhD

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Professor, Sociology and Anthropology; University of Wisconsin, Madison, PhD

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Professor, Health Sciences; University of Pennsylvania, PhD

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Assistant Teaching Professor, College of Professional Studies; Boston University, PhD

**Ronald Zullo**

Senior Lecturer, Accounting; Bentley University, MS

**Günther K. H. Zupanc**

Professor, Biology; University of California, San Diego, PhD; University of Tübingen (Germany), Dr. rer. nat. habil.

**Alexander Zvonok**

Research Assistant Professor, Pharmaceutical Sciences; Belarusian State University (Belarus), PhD

**Nikolai Zvonok**

Research Assistant Professor, Pharmaceutical Sciences; Russian Academy of Sciences (Russia), PhD

## Appendix

- University Leadership (p. 1214)
- Governing Boards and Officers of Northeastern (p. 1215)
- Statements of Accreditation and State Authorization (p. 1215)
- Major CIP Codes (p. 1217)
- Resources (p. 1234)
- General Information (p. 1234)

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### Accreditation

Northeastern University has maintained its status as a member in good standing of the New England Commission of Higher Education, Inc. (NECHE), previously New England Association of Schools and Colleges

(NEASC), since it was awarded its initial accreditation in 1940. The university was last reviewed by NECHE in 2018 and will be reviewed again in fall 2028.

Northeastern University possesses degree-granting authority in Massachusetts, under the auspices of the Massachusetts Board of Higher Education.

### ***Bouvé College of Health Sciences***

<b>Program</b>	<b>Accrediting Agency</b>
BS Health Science	Council on Education for Public Health (CEPH)
MPH Public Health	Council on Education for Public Health (CEPH)
BSN Nursing	Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing <sup>2</sup>
BSN Nursing, Accelerated Program for Second-Degree Students <sup>2</sup>	Commission on Collegiate Nursing Education (CCNE) and Massachusetts Board of Registration in Nursing <sup>2</sup>
BSN Nursing, Accelerated Program for Second-Degree Students <sup>3</sup>	Commission on Collegiate Nursing Education (CCNE) and North Carolina Board of Nursing <sup>3</sup>
MS Nursing	Commission on Collegiate Nursing Education (CCNE)
MS Nursing Anesthesia	Council on Accreditation of Nurse Anesthesia Educational Programs (COA); Commission on Collegiate Nursing Education (CCNE)
DNP Nursing Practice with Concentration in Nurse Anesthesia	Council on Accreditation of Nurse Anesthesia Educational Programs (COA); Commission on Collegiate Nursing Education (CCNE)
DNP Nursing Practice (Post-Master's)	Commission on Collegiate Nursing Education (CCNE)
MS Physician Assistant Studies	Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA)
DPT Physical Therapy	Commission on Accreditation of Physical Therapy Education (CAPTE)
MS Speech-Language Pathology	Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA), Massachusetts Board of Elementary and Secondary Education <sup>1</sup>
MS/CAGS School Psychology	Massachusetts Department of Education (DOE) and National Association of School Psychologists (NASP)
PhD Counseling Psychology	American Psychological Association (APA)

PhD School Psychology

American Psychological Association (APA) and National Association of School Psychologists (NASP)

PharmD Pharmacy

Accreditation Council for Pharmacy Education (ACPE)

<sup>1</sup> The Massachusetts Board of Education approves (not accredits) programs.

<sup>2</sup> The Massachusetts Board of Registration in Nursing approves (not accredits) programs.

<sup>3</sup> The North Carolina Board of Nursing approves (not accredits) programs.

### ***College of Arts, Media and Design***

<b>Program</b>	<b>Accrediting Agency</b>
Master of Architecture	National Architectural Accreditation Board (NAAB)

### ***D'Amore-McKim School of Business***

<b>Program</b>	<b>Accrediting Agency</b>
BSBA Business Administration	AACSB International—The Association to Advance Collegiate Schools of Business
BSIB International Business, MSIB International Business	AACSB International—The Association to Advance Collegiate Schools of Business
MBA	AACSB International—The Association to Advance Collegiate Schools of Business
MSF Finance	AACSB International—The Association to Advance Collegiate Schools of Business
MST Taxation	AACSB International—The Association to Advance Collegiate Schools of Business
MSA Accounting	AACSB International—The Association to Advance Collegiate Schools of Business
MSAMBA Accounting and Business Administration	AACSB International—The Association to Advance Collegiate Schools of Business
MSFMBA Finance and Business Administration	AACSB International—The Association to Advance Collegiate Schools of Business
MS Technological Entrepreneurship	AACSB International—The Association to Advance Collegiate Schools of Business

### ***College of Engineering***

<b>Program</b>	<b>Accrediting Agency</b>
BSCompE Computer Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSCHE Chemical Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSCE Civil Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>

BSEE Electrical Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSIE Industrial Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>
BSME Mechanical Engineering	Accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>

**College of Science**

Program	Accrediting Agency
BS Biochemistry	American Society for Biochemistry and Molecular Biology (ASBMB)

**College of Professional Studies**

Program	Accrediting Agency
BS Finance and Accounting Management <sup>1</sup>	AACSB International—The Association to Advance Collegiate Schools of Business
BS Management <sup>1</sup>	AACSB International—The Association to Advance Collegiate Schools of Business

BSET Computer Engineering Technology	Accredited by the Technology Accreditation Commission of ABET, 111 Market Place Suite 1050 Baltimore, MD 21202-4012 Telephone: 410.347.7700
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BSET Electrical Engineering Technology	Accredited by the Technology Accreditation Commission of ABET, 111 Market Place Suite 1050 Baltimore, MD 21202-4012 Telephone: 410.347.7700
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BSET Mechanical Engineering Technology	Accredited by the Technology Accreditation Commission of ABET, 111 Market Place Suite 1050 Baltimore, MD 21202-4012 Telephone: 410.347.7700
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Education Programs in:	
Elementary Education, 1-6	Massachusetts Department of Elementary and Secondary Education
Teacher of Biology, 8-12	Massachusetts Department of Elementary and Secondary Education
Teacher of Chemistry, 8-12	Massachusetts Department of Elementary and Secondary Education
Teacher of Earth Science, 5-8, 8-12	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 Mathematics, 5-8, 8-12	Massachusetts Department of Elementary and Secondary Education
Teacher of Physics, 8-12	Massachusetts Department of Elementary and Secondary Education
Teacher of Political Science/Political Philosophy, 8-12	Massachusetts Department of Elementary and Secondary Education
Teacher of Students with Moderate Disabilities Pre-K-8, 5-12	Massachusetts Department of Elementary and Secondary Education
MS Leadership (with concentration in Project Management)	Project Management Institute's Global Accreditation Center

<sup>1</sup> Accredited under the aegis of the “sponsoring” full-time college.

**College of Social Sciences and Humanities**

Program	Accrediting Agency
BS American Sign Language	Commission on Collegiate Interpreter Education
MPA Public Administration	Network of Schools of Public Policy, Affairs, and Administration

**School of Law**

Program	Accrediting Agency
JD Law	American Bar Association; Association of American Law Schools <sup>1</sup>

<sup>1</sup> The Association of American Law Schools is an elected membership organization, not an accrediting body.

**State Approvals, Authorizations, and Exemptions**

Some states require that universities authorized to operate in their state make public disclosures. See the corresponding addendum on the Online and Graduate Professional Degree Programs website (<http://www.northeastern.edu/online/about-northeastern-online/state-agreements.php>) for up-to-date, state-prescribed regulatory information applicable to all degree levels.

**Major CIP Codes**

The following is a list of Northeastern University majors for programs accepting new students during the 2020-2021 catalog year, along with each major's corresponding CIP code. “CIP” refers to the Classification of Instructional Programs published by the U.S. Department of Education's National Center for Education Statistics (<https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=56/>).

Academic Program	Major Transcript Title	Major CIP Code
P-CERTG-3DAN: 3-D Animation, Graduate Certificate	3-D Animation	100304
MSA-ACCT: Accounting, MSA	Accounting	520301
P-CERTU-ACCT: Accounting, Undergraduate Certificate	Accounting	520301



## 1218 Major CIP Codes

CERTG-ACFD: Accounting and Financial Decision Making, Graduate Certificate	Accounting/Financial Decisions	520899	BS-ARCS: Architectural Studies, BS	Architectural Studies	040801
CERTG-ACFD-O: Accounting and Financial Decision Making, Graduate Certificate—Online	Accounting/Financial Decisions	520899	BS-ARSD: Architectural Studies and Design, BS	Architectural Studies/Design	040803
P-CERTG-AORL: Adult and Organizational Learning, Graduate Certificate	Adult and Org Learning	131201	BS-ARCH: Architecture, BS	Architecture	040902
P-CERTU-AACT: Advanced Accounting, Undergraduate Certificate	Advanced Accounting	520301	MARCH-ARCH1: Master of Architecture—One-Year Program	Architecture	040902
P-BS-AVMS: Advanced Manufacturing Systems, BS	Advanced Manufacturing Systems	150613	MARCH-ARCH3: Master of Architecture—Three-Year Program	Architecture	040902
BA-AFCS: Africana Studies, BA	Africana Studies	050201	MARCH-ARCH3A: Master of Architecture—Three-Year Program—Advanced Degree Entrance	Architecture	040902
BS-AFCS: Africana Studies, BS	Africana Studies	050201	MARCH-ARCH2: Master of Architecture—Two-Year Program	Architecture	040902
P-CERTG-AGPM: Agile Project Management, Graduate Certificate	Agile Project Management	520211	BS-AENG: Architecture and English, BS	Architecture/English	040201
P-BS-ANLY: Analytics, BS	Analytics	110802	BA-ARTS: Art, BA	Art	500702
P-MPS-ANLY: Analytics, MPS	Analytics	110802	MS-ARIN: Artificial Intelligence	Artificial Intelligence	110102
P-CERTG-APAN: Applied Analytics, Graduate Certificate	Applied Analytics	307101	MS-AMCE: Arts Administration and Cultural Entrepreneurship, MS	Arts Adm & Cultural Entrepren	501099
CAGS-ABA: Applied Behavior Analysis, CAGS	Applied Behavior Analysis	422814	CERTG-ARAD: Arts Administration, Graduate Certificate	Arts Administration	501099
CERTG-ABA: Applied Behavior Analysis, Graduate Certificate	Applied Behavior Analysis	422814	BA-ASST: Asian Studies, BA	Asian Studies	050103
MS-ABA: Applied Behavior Analysis, MS	Applied Behavior Analysis	422814	BS-ASHU: American Sign Language and Human Services, BS	ASL / Human Services	161601
P-MPS-APMI: Applied Machine Intelligence, MPS	Applied Machine Intelligence	521301	BS-ASPS: American Sign Language and Psychology, BS	ASL / Psychology	161601
CERTG-AMTH: Applied Mathematics, Graduate Certificate	Applied Mathematics	270301	BS-ASTH: American Sign Language and Theatre, BS	ASL / Theatre	161601
MS-AMTH: Applied Mathematics, MS	Applied Mathematics	270301	BS-ASLN: American Sign Language and Linguistics, BS	ASL/ Linguistics	161601
P-MS-APNU: Applied Nutrition, MS	Applied Nutrition	301901	BS-BNPH: Behavioral Neuroscience and Philosophy, BS	Behav Neuroscience/Philosophy	261501
BS-APHY: Applied Physics, BS	Applied Physics	400801	BS-BENS: Behavioral Neuroscience, BS	Behavioral Neuroscience	261501
MS-APEN: Applied Physics and Engineering, MS	Applied Physics/Engineering	400801	BS-BNDS: Behavioral Neuroscience and Design, BS	Behavioral Neuroscience/Design	261501
MS-APPS: Applied Psychology, MS	Applied Psychology	422813	BS-BIOC: Biochemistry, BS	Biochemistry	260202
			BSBIOE-BION: Bioengineering	Bioengineering	149999

MSBIOE-BION: Bioengineering	149999	CERTG-BLCE: Blockchain & Smart	140903
Bioengineering, MSBioE		Blockchain and Smart	
PHD-BION: Bioengineering	149999	Contract Engineering,	
Bioengineering, PhD		Graduate Certificate	
PHD-BION-A: Bioengineering	149999	CERTG-TBWS: Broadband Wireless	110901
Bioengineering, PhD—		Broadband Wireless	
Advanced Entry		Systems	
BSBIOE-BEBC: Bioengineering/	149999	Systems, Graduate	
Bioengineering and		Certificate	
Biochemistry, BSBIOE		BS-BACS: Business	520101
CERTG-BINF: Bioinformatics	261103	Administration and	
Bioinformatics,		Communication	
Graduate Certificate		Studies, BS	
MS-BINF: Bioinformatics	261103	BS-BAPS: Business	520101
Bioinformatics, MS		Administration and	
P-BS-BIOS: Biological	260101	Psychology, BS	
Science, BS		BSBA-BSAD: Bachelor	520101
BS-BIOL: Biology, BS	260101	of Science in Business	
PHD-BIOL: Biology, PhD	260101	Administration, BSBA	
PHD-BIOL-A: Biology,	260101	CERTG-BSAD: Business	520101
PhD-Advanced Entry		Administration,	
BS-BENG: Biology and	269999	Graduate Certificate	
English, BS		CERTG-BSAD-	520101
BS-BIMA: Biology and	260101	O: Business	
Mathematics, BS		Administration,	
BS-BIPO: Biology and	269999	Graduate Certificate—	
Political Science, BS		Online	
BS-BIMP: Biomedical	260203	MBA-BSAD-F: Business	520101
Physics, BS		Administration, MBA—	
MS-BIOM: Biomedical	260102	Full-Time Program	
Sciences, MS		MBA-BSAD-O: Business	520101
PHD-BIOM: Biomedical	260102	Administration, MBA—	
Sciences, PhD		Online	
CERTG-BIAS: Biopharm Analytical Sci	400599	MBA-BSAD-E: Business	520101
Biopharmaceutical		Administration, MBA—	
Analytical Sciences,		Part-Time Program	
Graduate Certificate		BS-BUDE: Business	520101
P-CERTG-BPQD: Biopharmacy Quality	512099	Administration and	
Biopharmaceutical		Design, BS	
Domestic Regulatory		MS-BUSA: Business	521302
Affairs, Graduate		Analytics, MS	
Certificate		CERTG-BLAW: Business	220205
P-CERTG-BPQI: Biopharmacy Quality	512099	Law, Graduate	
International		Certificate	
Biopharmaceutical		BS-CMBI: Cell and	260406
Regulatory Affairs,		Molecular Biology, BS	
Graduate Certificate		Cell and Molecular	
P-BS-BIOT: Biotechnology	261201	Biology	
Biotechnology, BS		BSCHE-CHOC: Chem Engineering/	140701
CERTG-BIOT: Biotechnology	261201	Biochemistry	
Biotechnology,		and Biochemistry,	
Graduate Certificate		BSCHE	
MS-BIOT-SC: Biotechnology	261201	BSCHE-CHME: Chemical Engineering	140701
Biotechnology, MS		Chemical Engineering,	
CERTG-BITE: Biotechnology	261201	BSCHE	
Enterprise, Graduate		MSCHE-CHME: Chemical Engineering	140701
Certificate		Chemical Engineering,	
		MSCHE	
		PHD-CHME: Chemical	140701
		Engineering, PhD	
		PHD-CHME-A: Chemical	140701
		Engineering, PhD—	
		Advanced Entry	

## 1220 Major CIP Codes

BSCHE-CEPH: Chemical Engineering and Physics, BSCHE	Chemical Engineering/ Physics	140701	P-CERTG-CATH: Collegiate Athletics Administration, Graduate Certificate	Collegiate Athletics Admin	310504
BS-CHEM: Chemistry, BS	Chemistry	400501	BA-CMGR: Communication Studies and Graphic and Information Design, BA	Comm Stud/ Graph & Info Design	090101
MS-CHEM: Chemistry, MS	Chemistry	400501	BS-CMSL: Communication Studies and Speech-Language Pathology and Audiology	Comm Stud/Speech-Lang Path Aud	090101
PHD-CHEM: Chemistry, PhD	Chemistry	400501	BA-CMTH: Communication Studies and Theatre, BA	Comm Studies/Theatre	090199
PHD-CHEM-A: Chemistry, PhD-Advanced Entry	Chemistry	400501	P-MS-COED: Commerce and Economic Development, MS	Commerce & Economic Developmnt	450603
BSCE-CEAS: Civil Engineering and Architectural Studies, BSCE	Civil Eng/Arch Studies	140801	BA-CMME: Communication and Media Studies, BA	Communication & Media Studies	090199
MSCIVE-CIVE: Civil Engineering with Concentration in Construction Management, MSCivE	Civil Engineering	140801	BA-CMMS: Communication Studies and Media and Screen Studies, BA	Communication St/ Media Screen	090199
MSCIVE-CIVE: Civil Engineering with Concentration in Data and Systems, MSCivE	Civil Engineering	140801	BA-CMSO: Communication Studies and Sociology, BA	Communication Stud./ Sociology	090199
MSCIVE-CIVE: Civil Engineering with Concentration in Geotechnical/ Geoenvironmental Engineering, MSCivE	Civil Engineering	140801	BA-CMST: Communication Studies, BA	Communication Studies	090101
MSCIVE-CIVE: Civil Engineering with Concentration in Structures, MSCivE	Civil Engineering	140801	BS-CSBA: Computer Science and Business Administration, BS	Comp Sci/Business Admin	110101
MSCIVE-CIVE: Civil Engineering with Concentration in Transportation, MSCivE	Civil Engineering	140801	BS-CSCP: Computer Science and Cognitive Psychology, BS	Comp Sci/Cognitive Psyc	110101
MSCIVE-CIVE: Civil Engineering with Concentration in Water, Environmental, and Coastal Systems, MSCIVE	Civil Engineering	140801	BS-CSMA: Computer Science and Mathematics, BS	Comp Sci/Mathematics	110101
BSCE-CIVE: Civil Engineering, BSCE	Civil Engineering	140801	CERTG-COSS: Computational Social Science, Graduate Certificate	Computational Social Science	305202
PHD-CIVE: Civil Engineering, PhD	Civil Engineering	140801	BSCMPE-CMPE: Computer Engineering, BSCompE	Computer Engineering	140901
PHD-CIVE-A: Civil Engineering, PhD-Advanced Entry	Civil Engineering	140801	PHD-CMPE: Computer Engineering, PhD	Computer Engineering	140901
P-CERTG-CCAM: Cloud Computing Application and Management, Graduate Certificate	Cloud Computing App and Mgmt	110104	PHD-CMPE-A: Computer Engineering, PhD-Advanced Entry	Computer Engineering	140901
CERTG-CLSD: Cloud Software Development, Graduate Certificate	Cloud Software Development	110902	BSCMPE-CMPH: Computer Engineering and Physics, BSCompE	Computer Engineering/ Physics	140901

BSCMPE-CECS: Computer Engineering and Computer Science, BSCompE	Computer Engr/ Computer Science	140901	PHD-CSCI: Computer Science, PhD	Computer Science	110101
P-CERTG-CIWR: Computer Industry Writing, Graduate Certificate	Computer Industry Writing	090908	PHD-CSCI-A: Computer Science, PhD—Advanced Entry	Computer Science	110101
BS-CSPO: Computer Science and Political Science, BS	Computer Sci./ Political Sci.	110101	BS-CSBI: Computer Science and Biology, BS	Computer Science/ Biology	110101
BS-CSBN: Computer Science and Behavioral Neuroscience, BS	Computer Sci./Behavioral Neurosci	110101	BS-CSDE: Computer Science and Design, BS	Computer Science/ Design	110101
BS-CSCS: Computer Science and Communication Studies, BS	Computer Sci/ Communication Stu	110101	BS-CSEC: Computer Science and Economics, BS	Computer Science/ Economics	110101
BS-CSCJ: Computer Science and Criminal Justice, BS	Computer Sci./Criminal Justice	110101	BS-CSEG: Computer Science and English, BS	Computer Science/ English	110101
BS-CSEN: Computer Science and Environmental Science, BS	Computer Sci/ Environment Sci	110101	BS-CSHI: Computer Science and History, BS	Computer Science/ History	110101
BS-CGDV: Computer Science and Game Development, BS	Computer Sci./Game Development	110101	BS-CSJO: Computer Science and Journalism, BS	Computer Science/ Journalism	110101
BS-CSMU-MUTE: Computer Science and Music with Concentration in Music Technology, BS	Computer Sci./Music	110101	BS-CSLI: Computer Science and Linguistics, BS	Computer Science/ Linguistics	110101
BS-CSMU-MUTE: Computer Science and Music with Concentration in Music Technology, BS	Computer Sci./Music	110101	BS-CSME: Computer Science and Media Arts, BS	Computer Science/ Media Arts	110101
BS-CSPL: Computer Science and Philosophy, BS	Computer Sci/ Philosophy	110101	MSCSE-CMSE: Computer Systems Engineering with Concentration in Software Design Engineering, MSCSE	Computer System Engineering	140903
BS-CSPY: Computer Science and Physics, BS	Computer Sci./Physics	110101	P-CERTG-CONM: Construction Management, Graduate Certificate	Construction Management	460412
BS-CSSO: Computer Science and Sociology, BS	Computer Sci/ Sociology	110101	P-MS-CORC: Corporate and Organizational Communication, MS	Corporate & Org Communication	090101
BACS-CSCI: Computer Science, BACS	Computer Science	110101	CERTG-COFN: Corporate Finance, Graduate Certificate	Corporate Finance	520801
BSCS-CSCI: Computer Science, BSCS	Computer Science	110101	CERTG-COFN-O: Corporate Finance, Graduate Certificate—Online	Corporate Finance	520801
CERTG-CSCI: Computer Science, Graduate Certificate	Computer Science	110101	CERTG-CPRN: Corporate Renewal, Graduate Certificate	Corporate Renewal	520799
MSCS-CSCI: Computer Science, MSCS	Computer Science	110101	CERTG-CPRN-O: Corporate Renewal, Graduate Certificate—Online	Corporate Renewal	520799
MSCS-CSCI-AL: Computer Science, MSCS—Align	Computer Science	110101	CAGS-COPS: Counseling Psychology, CAGS	Counseling Psychology	422803
			MSCP-COPS: Counseling Psychology, MSCP	Counseling Psychology	422803

## 1222 Major CIP Codes

PHD-COPS-MSE: Counseling Psychology, PhD	Counseling Psychology	422803	MS-CYBS-AL: Cybersecurity, MS—ALIGN Program	Cybersecurity	111003
MS-CPLD: Creative Practice Leadership, MS	Creative Practice Leadership	509999	PHD-CYBS: Cybersecurity, PhD	Cybersecurity	111003
BS-CRJS: Criminal Justice, BS	Criminal Justice	430104	PHD-CYBS-A: Cybersecurity, PhD—Advanced Entry	Cybersecurity	111003
P-MS-CRJS: Criminal Justice, MS	Criminal Justice	430104	BS-CYBB: Cybersecurity and Business Administration, BS	Cybersecurity/Business Admin	111003
BS-CRJO: Criminal Justice and Journalism, BS	Criminal Justice/Journalism	430104	BS-CYCJ: Cybersecurity and Criminal Justice, BS	Cybersecurity/Criminal Justice	111003
BS-CJPH: Criminal Justice and Philosophy, BS	Criminal Justice/Philosophy	430104	BS-CYEC: Cybersecurity and Economics, BS	Cybersecurity/Economics	111003
BS-CRPO: Criminal Justice and Political Science, BS	Criminal Justice/Political Sci	430104	CERTG-DAAN: Data Analytics, Graduate Certificate	Data Analytics	110802
BS-CJPS: Criminal Justice and Psychology, BS	Criminal Justice/Psychology	430199	CERTG-DAAE: Data Analytics Engineering, Graduate Certificate	Data Analytics Engineering	149999
BS-CRSO: Criminal Justice and Sociology, BS	Criminal Justice/Sociology	430104	MS-DAAE: Data Analytics Engineering, MS	Data Analytics Engineering	149999
MS-CRCJ: Criminology and Criminal Justice, MS	Criminology & Criminal Justice	430104	MS-DAMG: Data Architecture and Management, MS	Data Architecture & Management	110802
PHD-CRJP: Criminology and Justice Policy, PhD	Criminology and Justice Policy	430104	BS-DSEE: Data Science and Ecology and Evolutionary Biology, BS	Data Sci/Ecology & Evol Bio	110802
PHD-CRJP-A: Criminology and Justice Policy, PhD-Advanced Entry	Criminology and Justice Policy	430104	BS-DSEN: Data Science and Environmental Science, BS	Data Sci/Environmental Sci	110802
P-CERTG-CCCM: Cross-Cultural Communication, Graduate Certificate	Cross-Cultural Communication	090100	BS-DASC: Data Science, BS	Data Science	110802
BA-CUAN: Cultural Anthropology, BA	Cultural Anthropology	451101	MS-DASC: Data Science, MS	Data Science	110802
BS-CUAN: Cultural Anthropology, BS	Cultural Anthropology	451101	MS-DASC-AL: Data Science, MS—ALIGN Program	Data Science	110802
BA-CUTH: Cultural Anthropology and Theatre, BA	Cultural Anthropology/Theatre	451101	BS-DSBN: Data Science and Behavioral Neuroscience, BS	Data Science/Behavioral Neuro	110802
CERTG-CUEN: Cultural Entrepreneurship, Graduate Certificate	Cultural Entrepreneurship	501099	BS-DSBC: Data Science and Biochemistry, BS	Data Science/Biochemistry	110802
MS-CYPS: Cyber-Physical Systems, MS	Cyber-Physical Systems	140903	BS-DSBL: Data Science and Biology, BS	Data Science/Biology	110802
BS-CYBS: Cybersecurity, BS	Cybersecurity	111003	BS-DSBA: Data Science and Business Administration, BS	Data Science/Business Admin	110802
CERTG-CYBS: Cybersecurity, Graduate Certificate	Cybersecurity	111003	BS-DSEC: Data Science and Economics, BS	Data Science/Economics	110802
MS-CYBS: Cybersecurity, MS	Cybersecurity	111003	BS-DSHS: Data Science and Health Science, BS	Data Science/Health Science	110802
			BS-DSJO: Data Science and Journalism, BS	Data Science/Journalism	110802

BS-DSLI: Data Science and Linguistics, BS	Data Science/ Linguistics	110802	MSECEL-ECEL: Electrical and Computer Engineering Leadership, MSECEL	Elec and Comp Engr	141001
BS-DSMA: Data Science and Mathematics, BS	Data Science/ Mathematics	110802	BSEE-ELCE: Electrical and Computer Engineering, BSEE or BSCompE	Electrical and Computer Engr	141001
BS-DSPH: Data Science and Physics, BS	Data Science/Physics	110802	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Communications, Control, and Signal Processing, MSECE	Electrical Engineering	141001
BS-DSPS: Data Science and Psychology, BS	Data Science/ Psychology	110802	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Computer Networks and Security, MSECE	Electrical Engineering	141001
BFA-DESN: Design, BFA	Design	500409	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Computer Systems and Software, MSECE	Electrical Engineering	141001
P-BS-DIME: Digital Communication and Media, BS	Digital Communication & Media	090702	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Computer Vision, Machine Learning, and Algorithms, MSECE	Electrical Engineering	141001
CERTG-DHUM: Digital Humanities, Graduate Certificate	Digital Humanities	240103	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Electromagnetics, Plasma, and Optics, MSECE	Electrical Engineering	141001
P-MPS-DGME: Digital Media, MPS	Digital Media	090702	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Hardware and Software for Machine Intelligence, MSECE	Electrical Engineering	141001
P-MPS-DGM-AL: Digital Media, MPS—Connect	Digital Media	090702	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Microsystems, Materials, and Devices, MSECE	Electrical Engineering	141001
P-CERTG-DGMM: Digital Media Management, Graduate Certificate	Digital Media Management	100105	MSECE-ELEE: Electrical and Computer Engineering with Concentration in Power Systems, MSECE	Electrical Engineering	141001
P-CERTG-DGVD: Digital Video, Graduate Certificate	Digital Video	500602			
CERTG-EINT: Early Intervention, Graduate Certificate	Early Intervention	131099			
BS-EEBI: Ecology and Evolutionary Biology, BS	Ecology & Evolutionary Biology	261310			
BA-ECON: Economics, BA	Economics	450603			
BS-ECON: Economics, BS	Economics	450603			
MS-ECON: Economics, MS	Economics	450603			
PHD-ECON: Economics, PhD	Economics	450603			
PHD-ECON-A: Economics, PhD—Advanced Entry	Economics	450603			
BS-ECBA: Economics and Business Administration, BS	Economics/Business Admin	450603			
BS-ECMA: Economics and Mathematics, BS	Economics/ Mathematics	450603			
BS-ECPH: Economics and Philosophy, BS	Economics/Philosophy	450603			
BS-ECPS: Economics and Psychology, BS	Economics/Psychology	450603			
P-EDD-EDUC: Education, EDD	Education	130101			
P-MED-EDUC: Education, MEd	Education	130101			
P-CERTG-LRID: e-Learning and Instructional Design, Graduate Certificate	eLearning & Instructional Design	130501			



## 1224 Major CIP Codes

BSEE-ELEE: Electrical Engineering, BSEE	Electrical Engineering	141001	PHD-ENGL-A: English, English	230101
PHD-ELEE: Electrical Engineering, PhD	Electrical Engineering	141001	BA-ENTH: English and Theatre, BA	230101
PHD-ELEE-A: Electrical Engineering, PhD-Advanced Entry	Electrical Engineering	141001	BA-ENAN: English and Cultural Anthropology, BA	230101
BSEE-EEMU: Electrical Engineering and Music with Concentration in Music Technology, BSEE	Electrical Engineering/ Music	141001	BA-ENCO: English and Communication Studies, BA	230101
BSEE-EEPH: Electrical Engineering and Physics, BSEE	Electrical Engineering/ Physics	141001	BA-ENCJ: English and Criminal Justice, BA	230101
P-MAT-ELED: Teaching, Elementary Licensure, MAT	Elementary Education	131202	BA-ENGD: English and Graphic and Information Design, BA	230101
P-CERTG-EMMG: Emergency Management, Graduate Certificate	Emergency Management	430302	BA-EPhi: English and Philosophy, BA	230101
CERTG-ENES: Energy Systems, Graduate Certificate	Energy Systems	142701	BA-ENPS: English and Political Science, BA	230101
MSENE-ENES: Energy Systems, MSENE	Energy Systems	142701	P-MPS-ENTI: Enterprise Intelligence, MPS	521301
MSENE-AL: Energy Systems, MSENE-Academic Link Program	Energy Systems	142701	BSENV-ENHS: Environmental Engineering and Health Sciences, BSEnvE	140801
CERTG-ENS: Energy Systems Management, Graduate Certificate	Energy Systems Management	142701	BSENV-ENVI: Environmental Engineering, BSEnvE	140801
MS-CEPP: Engineering and Public Policy, MS	Engineering and Public Policy	140899	MSENV-ENVI: Environmental Engineering, MSENV	140801
CERTG-ENBU: Engineering Business, Graduate Certificate	Engineering Business	140101	BS-ENVC: Environmental Science	030104
CERTG-EEDM: Engineering Economic Decision Making, Graduate Certificate	Engineering Economic Decision	140101	MS-ENPP: Environmental Science and Policy, MS	030103
CERTG-ENLR: Engineering Leadership, Graduate Certificate	Engineering Leadership	141001	BA-ENVS: Environmental Studies, BA	030103
CERTG-ENGM: Engineering Management, Graduate Certificate	Engineering Management	140101	BS-ENSS: Environmental and Sustainability Sciences, BS	030104
MSEM-ENGM: Engineering Management, MSEM	Engineering Management	140101	BSENV-EELA: Environmental Engineering and Landscape Architecture, BSEnvE	140801
CERTG-ETSM: Technology Systems Management, Graduate Certificate	Engineering Tech Systems Mgmt	140101	BS-ENSC: Environmental Science and Chemistry, BS	400601
BA-ENGL: English, BA	English	230101	BS-ENLA: Environmental Science and Landscape Architecture, BS	030103
MA-ENGL: English, MA	English	230101	BS-ENEC: Environmental Studies and Economics, BS	030103
PHD-ENGL: English, PhD	English	230101		

BA-ENHI: Environmental Studies and History, BA	Environmtl Studies/ History	030103	MSFMBA-E: Finance and Business Administration, MSFMBA—Part-Time	Finance/Business Admin	520801
BA-ENIA: Environmental Studies and International Affairs, BA	Environmtl Studies/Intl Affair	030103	P-CERTG-FIMI: Financial Markets and Institutions, Graduate Certificate	Financial Mkts and Inst	520899
BA-ENPH: Environmental Studies and Philosophy, BA	Environmtl Studies/ Philosophy	030103	P-CERTG-FACC: Forensic Accounting, Graduate Certificate	Forensic Accounting	430106
BA-ENPO: Environmental Studies and Political Science, BA	Environmtl Studies/ Politic Sci	030103	P-CERTG-FDDV: Fundraising and Development, Graduate Certificate	Fundraising and Development	520206
CERTG-EXSC: Exercise Science for Clinicians, Graduate Certificate	Exercise Science	310505	CERTG-GANY: Game Analytics, Graduate Certificate	Game Analytics	270501
MS-EXSC-PAPH: Exercise Science with Concentration in Physical Activity and Public Health, MS	Exercise Science	310505	BFA-GAAN: Game Art and Animation, BFA	Game Art and Animation	500605
CERTG-EXPD: Experience Design, Graduate Certificate	Experience Design	500499	BFA-GAME: Game Design, BFA	Game Design	100304
MFA-EXPD: Experience Design, MFA	Experience Design	500499	P-CERTG-GMDS: Game Design, Graduate Certificate	Game Design	100304
MS-EXPD: Experience Design, MS	Experience Design	500499	BS-GDMT: Game Design and Music with concentration in Music Technology, BS	Game Design/Music Tech Conc	100304
CERTG-EPHD: Experiential PhD Leadership, Graduate Certificate	Experiential PhD Leadership	520210	BS-GDMT: Game Design and Music with Concentration in Music Technology, BS	Game Design/Music Tech Conc	100304
P-CERTG-EXTL: Experiential Teaching and Learning, Graduate Certificate	Experiential Teach and Learn	130301	MS-GSAD: Game Science and Design, MS	Game Science and Design	100304
CERTG-EBIO: Experimental Biotechnology, Graduate Certificate	Experimental Biotechnology	261201	P-CERTG-GINT: Geographic Information Systems, Graduate Certificate	Geographic Information Tech	110103
MSF-FINA: Finance, MSF	Finance	520801	P-MPS-GSPS: Geospatial Services, MPS	Geospatial Services	110103
MSF-FINA-E: Finance, MSF—Evening / Part-Time Program	Finance	520801	P-CERTG-GSIR: Global Studies and International Relations, Graduate Certificate	Global Stu and Intl Relations	302001
MSF-FINA-O: Finance, MSF—Online	Finance	520801	P-MS-GSIR: Global Studies and International Relations, MS	Global Stu and Intl Relations	302001
P-BS-FIAM: Finance and Accounting Management, BS	Finance and Accounting Mgmt	520801	P-CERTG-GLSM: Global Student Mobility, Graduate Certificate	Global Student Mobility	130701
MSFMBA-FIBA: Finance and Business Administration, MSFMBA	Finance/Business Admin	520801	BS-GIDM: Graphic and Information Design and Mathematics, BS	Graphic and Info. Design/Math	500499
MSFMBA-O: Finance and Business Administration, MSFMBA—Online	Finance/Business Admin	520801			

## 1226 Major CIP Codes

CERTG-HIME: Health Informatics Management and Exchange, Graduate Certificate	Health Info Mgmt & Exchange	512706	MA-HIST: History, MA	History	540101
CERTG-HISP: Health Informatics Privacy and Security, Graduate Certificate	Health Info Privacy & Secu	512706	PHD-HIST: History, PhD	History	540101
CERTG-HISE: Health Informatics Software Engineering, Graduate Certificate	Health Info Software Eng	512706	PHD-HIST-A: History, PhD-Advanced Entry	History	540101
MS-HEIN: Health Informatics, MS	Health Informatics	512706	BA-HICL: History, Culture, and Law, BA	History, Culture, and Law	220000
CERTG-HLAW: Health Law, Graduate Certificate	Health Law	220208	BA-HIAS: History and Asian Studies, BA	History/Asian Studies	540101
CERTG-HLAP: Health Law and Policy, Graduate Certificate	Health Law and Policy	220208	BA-HICJ: History and Criminal Justice, BA	History/Criminal Justice	540101
P-CERTG-HLMG: Health Management, Graduate Certificate	Health Management	510799	BA-HICA: History and Cultural Anthropology, BA	History/Cultural Anthropol	540101
BS-HLSC: Health Science, BS	Health Science	510799	BA-HIEC: History and Economics, BA	History/Economics	540101
P-BS-HLSC: Health Science, BS	Health Science	510799	BS-HIEC: History and Economics, BS	History/Economics	540101
BS-HSBA: Health Science and Business Administration, BS	Health Science/Business Admin	510799	BA-HIEN: History and English, BA	History/English	540101
BS-HLCM: Health Science and Communication Studies, BS	Health Science/Comm Studies	510799	BA-HIPH: History and Philosophy, BA	History/Philosophy	540101
BS-HSPS: Health Science and Psychology, BS	Health Science/Psychology	510799	BA-HIPS: History and Political Science, BA	History/Political Science	540101
BS-HSSO: Health Science and Sociology, BS	Health Science/Sociology	510799	BA-HIRS: History and Religious Studies, BA	History/Religious Studies	540101
CERTG-HCAP: Healthcare Administration and Policy, Graduate Certificate	Healthcare Admin & Policy	521099	P-MA-HOSE: Homeland Security, MA	Homeland Security	430301
P-BS-HCAD: Healthcare Administration, BS	Healthcare Administration	510701	P-CERTG-HUIN: Human-Centered Informatics, Graduate Certificate	Human Centered Informatics	110104
CERTG-CLAW: Healthcare Compliance, Law Graduate Certificate	Healthcare Compliance, Law	220208	MS-HUFA: Human Factors, MS	Human Factors	142701
P-CERTG-HEDA: Higher Education Administration, Graduate Certificate	Higher Education Admin	130406	PHD-HMRS: Human Movement and Rehabilitation Sciences, PhD	Human Movement & Rehab Science	512314
P-MED-HEDA: Higher Education Administration, MED	Higher Education Admin	130406	CERTG-HURL: Human Resources Law, Graduate Certificate	Human Resources Law-Legal St.	220299
BA-HIST: History, BA	History	540101	P-CERTG-HRMG: Human Resources Management, Graduate Certificate	Human Resources Management	521001
BS-HIST: History, BS	History	540101	P-MS-HRMG: Human Resources Management, MS	Human Resources Management	521001
			BA-HSVC: Human Services, BA	Human Services	440000
			BS-HSVC: Human Services, BS	Human Services	440000
			BA-HUSO: Human Services and Sociology, BA	Human Services / Sociology	449999
			BS-HUSO: Human Services and Sociology, BS	Human Services / Sociology	449999

BA-HSCM: Human Services and Communication Studies, BA	Human Services/Comm. Studies	440000	PHD-IDSM: Interdisciplinary Design and Media, PhD	Interdisciplinary Dsgn & Media	500401
BS-HSCJ: Human Services and Criminal Justice, BS	Human Services/Crim Justice	430199	PHD-INTE: Interdisciplinary Engineering, PhD	Interdisciplinary Engineering	140101
BA-HSIA: Human Services and International Affairs, BA	Human Services/Intl Affairs	440000	BA-INAF: International Affairs with African Studies Concentration, BA	International Affairs	450901
BSIE-INDE: Industrial Engineering, BSIE	Industrial Engineering	143501	BA-INAF: International Affairs with Asian Studies Concentration, BA	International Affairs	450901
MSIE-INDE: Industrial Engineering, MSIE	Industrial Engineering	143501	BA-INAF: International Affairs with European Studies Concentration, BA	International Affairs	450901
PHD-INDE: Industrial Engineering, PhD	Industrial Engineering	143501	BA-INAF: International Affairs with Latin American Studies Concentration, BA	International Affairs	450901
PHD-INDE-A: Industrial Engineering, PhD-Advanced Entry	Industrial Engineering	143501	BA-INAF: International Affairs with Middle East Studies Concentration, BA	International Affairs	450901
CERTG-IDEV: Information Design and Visualization, Graduate Certificate	Info Design and Visualization	500401	BA-INAF: International Affairs, BA	International Affairs	450901
MFA-IDDV: Information Design and Data Visualization, MFA	Info Dsgn & Data Visualization	303101	MA-INAF: International Affairs, MA	International Affairs	450901
MS-IDDV: Information Design and Data Visualization, MS	Info Dsgn & Data Visualization	303101	BA-IAHI: International Affairs and History, BA	International Affairs/History	450901
P-CERTG-INSM: Information Security Management, Graduate Certificate	Info Security Management	439999	BSIB-INBU-X: International Business, BSIB	International Business	521101
P-MPS-INFM: Informatics, MPS	Informatics	110104	BSIB-INBU-NX: International Business, BSIB	International Business	521101
CERTG-INET: Information Ethics, Graduate Certificate	Information Ethics	380104	CERTG-INBU: International Business, Graduate Certificate	International Business	521101
MSIS-INSY: Information Systems, MSIS	Information Systems	140903	CERTG-INBU-O: International Business, Graduate Certificate—Online	International Business	521101
P-BS-INFT: Information Technology, BS	Information Technology	110103	MSIB-INBU: International Business, MSIB	International Business	521101
MS-INOV: Innovation, MS	Innovation	520210	MS-INMA: International Management, MS	International Management	520101
CERTG-IMGT: Innovation Management, Graduate Certificate	Innovation Management	520210	BA-IARS: International Affairs and Religious Studies, BA	Interntl Affairs/Religious Stu	450901
P-CERTG-INHW: Integrative Health and Wellness, Graduate Certificate	Integrative Health & Wellness	510001	BA-IAAN: International Affairs and Cultural Anthropology, BA	Intl Affairs/Anthropology	450901
CERTG-PLAW: Intellectual Property Law, Graduate Certificate	Intellectual Property Law	220212	BA-IACJ: International Affairs and Criminal Justice, BA	Intl Affairs/Criminal Justice	450901
P-CERTG-INDS: Interactive Design, Graduate Certificate	Interactive Design	110801			

## 1228 Major CIP Codes

BA-IAEC: International Affairs and Economics, BA	Intl Affairs/Economics	450604	CERTG-LEAN: Lean Six Sigma, Graduate Certificate	Lean Six Sigma	140101
BS-IAIB: International Affairs and International Business, BS	Intl Affairs/Intl Business	450901	P-CERTG-LRNA: Learning Analytics, Graduate Certificate	Learning Analytics	130601
CERTG-INVS: Investments, Graduate Certificate	Investments	520807	MLS-LEGS: Legal Studies, MLS—Online	Legal Studies	229999
CERTG-TIPS: IP Telephony Systems, Graduate Certificate	IP/Telephony Systems	110901	P-BS-LIBS: Liberal Studies, BS	Liberal Studies	240101
BA-JESR: Jewish Studies and Religion, BA	Jewish Studies/ Religion	380206	BS-LING: Linguistics, BS	Linguistics	160102
BA-JOUR: Journalism, BA	Journalism	090401	BS-LICA: Linguistics and Cultural Anthropology, BS	Linguistics / Cultural Anthro	450204
MA-JOUR: Journalism, MA	Journalism	090401	BA-LIEN: Linguistics and English, BA	Linguistics / English	160102
BA-JOEN: Journalism and English, BA	Journalism/ English	090401	BS-LIPS: Linguistics and Psychology, BS	Linguistics / Psychology	160102
BS-JLID: Journalism and Interaction Design, BS	Journalism/Interaction Design	090401	BA-LICS: Linguistics and Communication Studies, BA	Linguistics/Comm Studies	160102
BA-JOPO: Journalism and Political Science, BA	Journalism/Political Science	090401	BS-LISL: Linguistics and Speech-Language Pathology and Audiology, BS	Linguistics/Speech-Lng Pth Aud	160102
BLA-LARC: Landscape Architecture, BLA	Landscape Architecture	040601	P-BS-MGMT: Management, BS	Management	520201
JD-LAW: Law, JD	Law	220101	CERTG-MQOB: Manufacturing and Quality Operations in Biotechnology, Graduate Certificate	Manuf & Qual Oper in Biotech	512010
LLM-LAW-T: Law, LLM	Law	220101	MS-MRES: Marine and Environmental Sciences, MS	Marine & Environment Sciences	030104
LLM-LAW: Law, LLM—Experiential	Law	220101	PHD-MRES: Marine and Environmental Sciences, PhD	Marine & Environment Sciences	030104
LLM-LAW-O: Law, LLM—Online	Law	220101	PHD-MRES-A: Marine and Environmental Sciences, PhD—Advanced Entry	Marine & Environment Sciences	030104
P-DLP-LAPO: Law And Policy, DLP	Law and Policy	229999	BS-MARB: Marine Biology, BS	Marine Biology	261302
P-BS-LEAD: Leadership, BS	Leadership	520213	MS-MARB: Marine Biology, MS-Three Seas Program	Marine Biology	261302
P-CERTG-LEAD: Leadership, Graduate Certificate	Leadership	520213	CERTG-MKTG: Marketing, Graduate Certificate	Marketing	521401
P-MS-LEAD: Leadership, MS	Leadership	520213	CERTG-MKTG-O: Marketing, Graduate Certificate—Online	Marketing	521401
P-CERTU-LEAD: Leadership, Undergraduate Certificate	Leadership	520213	CERTG-MKAN: Marketing Analytics, Graduate Certificate	Marketing Analytics	521402
CERTG-LDHC: Leadership and Human Capital, Graduate Certificate	Leadership and Human Capital	521099	BA-MATH: Mathematics, BA	Mathematics	270101
P-CERTG-PMTE: Leading and Managing Technical Projects, Graduate Certificate	Leadng & Managng Tech Projects	520211			

BS-MATH: Mathematics	270101	BSME-MEDS: Mechanical	141901
Mathematics, BS		Mechanical Engineering/Design and Design, BSME	
MS-MATH: Mathematics	270101	BSME-MEPH: Mechanical	141901
Mathematics, MS		Mechanical Engineering/Physics and Physics, BSME	
PHD-MATH: Mathematics	270101	P-BS-MTRO: Mechatronics	144201
Mathematics, PhD		Mechatronics, BS	
PHD-MATH-A: Mathematics	270101	BA-MSPH: Media and Screen Stud/Philosophy	090199
Mathematics, PhD-Advanced Entry		Philosophy, BA	
BS-MAAN: Mathematics/Anthropology	270101	BA-MSHI: Media and Screen Studies/History	090199
Mathematics and Cultural Anthropology, BS		History, BA	
BS-MABA: Mathematics/Business Admin	270101	MS-MEDA: Media Advocacy	099999
Mathematics and Business Administration, BS		Media Advocacy, MS	
BS-MAPH: Mathematics/Physics	270101	BA-MSST: Media and Screen Studies, BA	090199
Mathematics and Physics, BS		Media and Screen Studies	
BS-MAPO: Mathematics and Political Science, BS	270101	BFA-MART: Media Arts, BFA	500102
Mathematics/Political Science		Media Arts	
BS-MAPY: Mathematics and Psychology, BS	270101	BA-MACM: Media Arts and Communication Studies, BA	500102
Mathematics/Psychology		Media Arts/Communication Stud.	
BS-MASO: Mathematics and Sociology, BS	270101	BA-MSJO: Media and Screen Studies and Journalism, BA	090199
Mathematics/Sociology		Media Screen Stu/Journalism	
MSME-MECE: Mechanical Engineering with Concentration in General Mechanical Engineering, MSME	141901	BA-MSPO: Media and Screen Studies and Political Science, BA	090199
		Media Screen Stu/Political Sci	
MSME-MECE: Mechanical Engineering with Concentration in Materials Science, MSME	141901	BA-MSSO: Media and Screen Studies and Sociology, BA	090199
		Media Screen Stu/Sociology	
MSME-MECE: Mechanical Engineering with Concentration in Mechanics and Design, MSME	141901	BA-MSTH: Media and Screen Studies and Theatre, BA	090199
		Media Screen Stu/Theatre	
MSME-MECE: Mechanical Engineering with Concentration in Mechatronics, MSME	141901	BS-MSTH: Media and Screen Studies and Theatre, BS	090199
		Media Screen Stu/Theatre	
MSME-MECE: Mechanical Engineering with Concentration in Thermofluids, MSME	141901	BA-MSMA: Media and Screen Studies and Media Arts, BA	090199
		Media Screen Stud./Media Arts	
BSME-MECE: Mechanical Engineering, BSME	141901	BA-MSEN: Media and Screen Studies and English, BA	090199
		Media Screen Studies/English	
PHD-MECE: Mechanical Engineering, PhD	141901	P-CERTG-MDRA: Medical Device Regulatory Affairs, Graduate Certificate	512799
		Medical Devices	
PHD-MECE-A: Mechanical Engineering, PhD-Advanced Entry	141901	MS-MEDC: Medicinal Chemistry, MS	512004
		Medicinal Chemistry	
		PHD-MEDC: Medicinal Chemistry, PhD	512004
		Medicinal Chemistry	
		PHD-MEDC-A: Medicinal Chemistry, PhD—Advanced Entry	512004
		Medicinal Chemistry	
		CERTG-MOBI: Molecular Biotechnology, Graduate Certificate	261201
		Molecular Biotechnology	



## 1230 Major CIP Codes

BS-MUSI-MUID: Music with Concentration in Music Industry, BS	Music	500901	PHD-NURS-MSE: Nursing, PhD—Advanced Entry (Post-MSN)	Nursing	513801
BS-MUSI-MUTE: Music with Concentration in Music Technology, BS	Music	500901	CAGS-CCAC: Nursing—Adult-Gerontology Nurse Practitioner, Acute Care, CAGS	Nursing	513801
BS-MUSI-MUTE: Music with Concentration in Music Technology, BS	Music	500901	MS-CCAC: Nursing—Adult-Gerontology Nurse Practitioner, Acute Care, MS	Nursing	513801
BA-MUSI: Music, BA	Music	500901	CAGS-PCAN: Nursing—Adult-Gerontology Nurse Practitioner, Primary Care, CAGS	Nursing	513801
BS-MUCM: Music and Communication Studies with Concentration in Music Industry, BS	Music/Communication Studies	500901	MS-PCAN: Nursing—Adult-Gerontology Nurse Practitioner, Primary Care, MS	Nursing	513801
BS-MUCM: Music and Communication Studies with Concentration in Music Industry, BS	Music/Communication Studies	500901	MS-PCFN: Nursing—Family Nurse Practitioner, Primary Care, MS	Nursing	513801
CERTG-MFMG: Mutual Fund Management, Graduate Certificate	Mutual Fund Management	520807	CAGS-CCNN: Nursing—Neonatal Nurse Practitioner, CAGS	Nursing	513801
CERTG-NNMD: Nanomedicine, Graduate Certificate	Nanomedicine	151601	MS-CCNN: Nursing—Neonatal Nurse Practitioner, MS	Nursing	513801
PHD-NETS: Network Science, PhD	Network Science	300601	CAGS-PEPA: Nursing—Pediatric Nurse Practitioner, Acute and Primary Care, CAGS	Nursing	513801
P-CERTG-NCBR: Nonclinical Biomedical Product Regulation, Graduate Certificate	Nonclinical Biomed Product Reg	512002	MS-PEPA: Nursing—Pediatric Nurse Practitioner, Acute and Primary Care, MS	Nursing	513801
P-CERTG-NPMG: Nonprofit Management, Graduate Certificate	Nonprofit Management	520206	CAGS-PEAC: Nursing—Pediatric Nurse Practitioner, Acute Care, CAGS	Nursing	513801
P-MS-NPMG: Nonprofit Management, MS	Nonprofit Management	520206	CAGS-PEPC: Nursing—Pediatric Nurse Practitioner, Primary Care, CAGS	Nursing	513801
CERTG-NPSC: Nonprofit Sector, Philanthropy, and Social Change, Graduate Certificate	Nonprof-Philanth-Social Change	520206	MS-PEPC: Nursing—Pediatric Nurse Practitioner, Primary Care, MS	Nursing	513801
DNP-CRNA: Nursing Practice with Concentration in Nurse Anesthesia, DNP	Nursing	513801	CAGS-PSMH: Nursing—Psychiatric-Mental Health Nurse Practitioner, CAGS	Nursing	513801
DNP-NURS: Nursing Practice, DNP (Post-Master's)	Nursing	513801	MS-PSMH: Nursing—Psychiatric-Mental Health Nurse Practitioner, MS	Nursing	513801
BSN-NURS: Nursing, BSN	Nursing	513801			
BSN-NURS-2: Nursing, BSN—Accelerated Program for Second-Degree Students	Nursing	513801			
MS-NURS-DE: Nursing, MS—Direct Entry	Nursing	513801			
PHD-NURS: Nursing, PhD	Nursing	513801			

CERTG-NURI: Nursing Informatics, Graduate Certificate	Nursing Informatics	512706	DPT-PHTH-DE: Physical Therapy, DPT—Postbaccalaureate Entry	Physical Therapy	512308
MSOR-OPRE: Operations Research, MSOR	Operations Research	143701	P-DPT-PHTH: Transitional Doctor of Physical Therapy, DPT	Physical Therapy	512308
MSOR-OPRE-AS: Operations Research, MSOR	Operations Research	143701	P-DPT-PHT-DE: Transitional Doctor of Physical Therapy, DPT—Direct Entry	Physical Therapy	512308
P-CERTG-ORGC: Organizational Communication, Graduate Certificate	Organizational Communication	090101	MS-PHAS: Physician Assistant Studies, MS	Physician Assistant	510912
P-CERTG-ORPT: Advanced Study In Orthopedics, Graduate Certificate	Orthopedic Physical Therapy	512399	BS-PHYS: Physics, BS	Physics	400801
PHD-PHEI: Personal Health Informatics, PhD	Personal Health Informatics	512706	MS-PHYS: Physics, MS	Physics	400801
PHD-BIOM-A: Biomedical Sciences, PhD—Advanced Entry	Pharmaceutical Sciences	512010	PHD-PHYS: Physics, PhD	Physics	400801
BS-PHSC: Pharmaceutical Sciences, BS	Pharmaceutical Sciences	512010	PHD-PHYS-A: Physics, PhD-Advanced Entry	Physics	400801
MS-PHSC: Pharmaceutical Sciences, MS	Pharmaceutical Sciences	512010	BS-PHMU: Physics and Music with Concentration in Music Technology, BS	Physics/Music	400801
PHD-PHSC: Pharmaceutical Sciences, PhD	Pharmaceutical Sciences	512010	BS-PHPH: Physics and Philosophy, BS	Physics/Philosophy	400801
PHD-PHSC-A: Pharmaceutical Sciences, PhD—Advanced Entry	Pharmaceutical Sciences	512010	BA-POLI: Political Science, BA	Political Science	451001
PHD-PHAC-A: Pharmacology, PhD—Advanced Entry	Pharmaceutical Sciences	512010	BS-POLI: Political Science, BS	Political Science	451001
CERTG-PHTE: Pharmaceutical Technologies, Graduate Certificate	Pharmaceutical Technologies	261201	MA-POLI: Political Science, MA	Political Science	451001
MS-PHAC: Pharmacology, MS	Pharmacology	261001	PHD-POLI: Political Science, PhD	Political Science	451001
PHD-PHAC: Pharmacology, PhD	Pharmacology	261001	PHD-POLI-A: Political Science, PhD-Advanced Entry	Political Science	451001
PHARMD-G: Pharmacy, PharmD	Pharmacy	512001	BS-POBA: Political Science and Business Administration, BS	Political Science/ Business Adm	451001
PHARMD-G-DE: Pharmacy, PharmD—Direct Entry	Pharmacy	512001	BA-POCM: Political Science and Communication Studies, BA	Political Science/ Comm Studies	451001
PHARMD-U: Pharmacy Studies, BS	Pharmacy Studies	512001	BS-POCM: Political Science and Communication Studies, BS	Political Science/ Comm Studies	451001
BA-PHIL: Philosophy, BA	Philosophy	380101	BA-POEC: Political Science and Economics, BA	Political Science/ Economics	451001
BS-PHIL: Philosophy, BS	Philosophy	380101	BS-POEC: Political Science and Economics, BS	Political Science/ Economics	450603
			BA-POHS: Political Science and Human Services, BA	Political Science/ HumanService	451001
			BS-POHS: Political Science and Human Services, BS	Political Science/ HumanService	451001

## 1232 Major CIP Codes

BA-POIA: Political Science and International Affairs, BA	Political Science/Intl Affairs	451001	BS-PSYC: Psychology, BS	Psychology	422799
BA-POPL: Political Science and Philosophy, BA	Political Science/Philosophy	451001	P-BS-PSYC: Psychology, BS	Psychology	422799
BS-POPL: Political Science and Philosophy, BS	Political Science/Philosophy	451001	PHD-PSYC: Psychology, PhD	Psychology	422799
BS-PSPE: Politics, Philosophy, and Economics, BS	Politics/Philosophy/Economics	451099	PHD-PSYC-A: Psychology, PhD-Advanced Entry	Psychology	422799
PHD-POHE: Population Health, PhD	Population Health	512299	BS-PSMU: Psychology and Music, BS	Psychology/Music	422799
P-CERTG-PTSC: Port Security, Graduate Certificate	Port Security	430301	MPA-PUAD: Public Administration, MPA	Public Administration	440401
CERTG-PLEJ: Poverty Law and Economic Justice, Graduate Certificate	Poverty Law & Economic Justice	220299	P-CERTG-PUMR: Public and Media Relations, Graduate Certificate	Public and Media Relations	090102
P-CERTU-PMED: Pre-Medical Studies, Post-Baccalaureate Undergraduate Certificate	Pre-Medical Studies	511102	MPH-PUHE: Public Health, MPH	Public Health	512201
P-CERTU-PRMA: Principles of Manufacturing, Undergraduate Certificate	Principles of Manufacturing	150613	CERTG-PUHI: Public History, Graduate Certificate	Public History	540105
CERTG-PRVL: Privacy Law, Graduate Certificate	Privacy Law	220299	MPP-PUPL: Public Policy, MPP	Public Policy	440401
CERTG-PSEN: Process Safety Engineering, Graduate Certificate	Process Safety Engineering	140799	PHD-PUPL: Public Policy, PhD	Public Policy	440401
CERTG-PRSC: Process Science, Graduate Certificate	Process Sciences	261201	PHD-PUPL-A: Public Policy, PhD-Advanced Entry	Public Policy	440401
MSAMBA-PRAC: Accounting and Business Administration, MSAMBA	Professional Accounting	520301	CERTG-PUPA: Public Policy Analysis, Graduate Certificate	Public Policy Analysis	440501
P-CERTG-PSAD: Professional Sports Administration, Graduate Certificate	Professional Sports Administration	310504	P-CERTG-QABM: Quality Assurance in Biomedical Product Regulation, Graduate Certificate	Quality Assurance Biomedical	512002
P-CERTG-PBUA: Project Business Analysis, Graduate Certificate	Project Business Analysis	521302	MSFMBA-QFBA: Quantitative Finance and Business Administration, MSFMBA	Quant Finance/ Business Admin	270305
P-BS-PMGT: Project Management, BS	Project Management	521301	MSF-QFIN: Quantitative Finance, MSF	Quantitative Finance	270305
P-CERTG-PMGT: Project Management, Graduate Certificate	Project Management	521301	P-MS-REAF: Regulatory Affairs, MS	Regulatory Affairs	512009
P-MS-PMGT: Project Management, MS	Project Management	521301	CERTG-RESC: Regulatory Science, Graduate Certificate	Regulatory Science	512004
			BA-REST: Religious Studies, BA	Religious Studies	380201
			BA-RSAS: Religious Studies and Africana Studies, BA	Religious Studies/Africana St.	380201
			P-CERTG-RESE: Remote Sensing, Graduate Certificate	Remote Sensing	450799
			CERTG-ERES: Renewable Energy, Graduate Certificate	Renewable Energy Systems	142701

P-MS-RECL: Respiratory Care Leadership, MS	Respiratory Care Leadership	510908	BA-SPIA: Spanish and International Affairs, BA	Spanish/ International Affairs	160905
P-CERTG-RSPC: Respiratory Specialty Practice, Graduate Certificate	Respiratory Specialty Prac	510908	BS-SLPA: Speech-Language Pathology and Audiology, BS	Speech-Lang Pathol/ Audiology	510204
MS-ROBO: Robotics, MS	Robotics	144201	MS-SLPT: Speech-Language Pathology, MS	Speech-Language Pathology	510204
MS-AEPP/CAGS-SCPS: School Psychology, MS/CAGS	School Psychology	422805	P-MSLD-SPLE: Sports Leadership, MSLD	Sports Leadership	310504
PHD-SCPS-BSE: School Psychology, PhD	School Psychology	422805	P-MA-STIA: Strategic Intelligence and Analysis, MA	Strategic Intel. & Analysis	430399
PHD-SCPS-MSE: School Psychology, PhD—Advanced Entry	School Psychology	422805	BFA-STAR: Studio Art, BFA	Studio Art	500702
P-MAT-SCED: Teaching, Secondary Licensure, MAT	Secondary Education	131205	CERTG-SCEM: Supply Chain Engineering Management, Graduate Certificate	Supply Chain Engineering Mgmt	140101
CERTG-SERE: Security and Resilience Studies, Graduate Certificate	Security & Resilience Studies	450999	CERTG-SUPC: Supply Chain Management, Graduate Certificate	Supply Chain Management	520203
MS-SERE: Security and Resilience Studies, MS	Security & Resilience Studies	450999	CERTG-SUPC-O: Supply Chain Management, Graduate Certificate—Online	Supply Chain Management	520203
P-CERTG-SOME: Social Media and Online Communities, Graduate Certificate	Social Media/Online Community	090101	CERTG-SUCP: Sustainability and Climate Change Policy, Graduate Certificate	Sustain & Climate Chng Policy	440501
BA-SOCI: Sociology, BA	Sociology	451101	MSSBS-SUBS: Sustainable Building Systems, MSSBS	Sustainable Building Systems	149999
BS-SOCI: Sociology, BS	Sociology	451101	CERTG-SESY: Sustainable Energy Systems, Graduate Certificate	Sustainable Energy Systems	142701
MA-SOCI: Sociology, MA	Sociology	451101	MDES-SUEN1: Master of Design for Sustainable Urban Environments—One-Year Program	Sustainable Urban Environments	040401
PHD-SOCI: Sociology, PhD	Sociology	451101	MDES-SUEN: Master of Design for Sustainable Urban Environments—Two-Year Program	Sustainable Urban Environments	040401
PHD-SOCI-A: Sociology, PhD-Advanced Entry	Sociology	451101	MST-TAXA: Taxation, MST	Taxation	521601
BA-SOCA: Sociology and Cultural Anthropology, BA	Sociology/Cultural Anthropol	451101	MST-TAXA-O: Taxation, MST—Online	Taxation	521601
BS-SOCA: Sociology and Cultural Anthropology, BS	Sociology/Cultural Anthropol	451101	CERTG-TECE: Technological Entrepreneurship, Graduate Certificate	Technological Entrepreneurship	520701
BA-SOES: Sociology and Environmental Studies, BA	Sociology/Envr. Studies	451101	MS-TECE: Technological Entrepreneurship, MS	Technological Entrepreneurship	520701
BA-SOIA: Sociology and International Affairs, BA	Sociology/Int'l Affairs	451101	CERTG-TELD: Technology Leadership, Graduate Certificate	Technology Leadership	520216
BA-SOPO: Sociology and Political Science, BA	Sociology/Political Science	459999			
CERTG-SWES: Software Engineering Systems, Graduate Certificate	Software Engineering Systems	140903			
MS-SWES: Software Engineering Systems, MS	Software Engineering Systems	140903			
BA-SPAN: Spanish, BA	Spanish	160905			

MS-TNET: Telecommunication Networks, MS	Telecommunication Networks	110901
BA-THEA: Theatre, BA	Theatre	500501
BS-THEA: Theatre, BS	Theatre	500501
BA-THID: Theatre and Interaction Design, BA	Theatre/Interaction Design	500501
BS-THID: Theatre and Interaction Design, BS	Theatre/Interaction Design	500501
CERTG-URBA: Urban Analytics, Graduate Certificate	Urban Analytics	451201
MS-URBI: Urban Informatics, MS	Urban Informatics	111099
MS-URPP: Urban Planning and Policy, MS	Urban Planning and Policy	451201
CERTG-URBN: Urban Studies, Graduate Certificate	Urban Studies	451201
P-CERTG-USAB: Usability, Graduate Certificate	Usability	111004
CERTG-WGSL: Women, Gender, Sexuality, and the Law, Graduate Certificate	Women, Gender, Sexuality & Law	220299
CERTG-WOST: Women's, Gender, and Sexuality Studies, Graduate Certificate	Women's Gender & Sexuality Stu	050207

## Resources

### Online Resources

The following online resources supplement this catalog:

- **University events**
- Class schedules (<https://registrar.northeastern.edu/article/schedule-of-classes/>)
- Academic calendars (<http://www.northeastern.edu/registrar/calendars.html>)
- Campus maps (<http://www.northeastern.edu/campusmap/>)

### General Information

The *Northeastern University Catalog* contains the university's primary statements about approved academic programs and degree requirements, as authorized by the president or the Board of Trustees.

The *Northeastern University Catalog* contains current information about the university calendar, admissions, degree requirements, fees, and regulations; however, such information is not intended and should not be regarded to be contractual.

**Accreditation.** Northeastern University is accredited by the New England Commission of Higher Education, Inc.

**Delivery of Services.** Northeastern University assumes no liability for delay or failure to provide educational or other services or facilities due to

causes beyond its reasonable control. Causes include, without limitation, power failure, fire, strikes by university employees or others, damage by natural elements, and acts of public authorities. The university will, however, exert reasonable efforts, when it judges them to be appropriate, to provide comparable services, facilities, or performance; but its inability or failure to do so shall not subject the university to liability.

Northeastern University reserves the sole right to promulgate and change rules and regulations and to make changes of any nature in its program; calendar; admissions policies, procedures, and standards; degree requirements; fees; and academic schedule whenever necessary or desirable, including, without limitation, changes in course content and class schedule, the cancellation of scheduled classes and other academic activities, and the substitution of alternatives for scheduled classes and other academic activities. In any such case, the university will give whatever notice is reasonably practical.

Northeastern University will endeavor to make available to its students a fine education and a stimulating and congenial environment. However, the quality and rate of progress of an individual's academic career and professional advancement upon completion of a degree or program are largely dependent on his or her own abilities, commitment, and effort. In many professions and occupations, there are also requirements imposed by federal and state statutes and regulatory agencies for certification or entry into a particular field. These requirements may change while a student is enrolled in a program and may vary from state to state or country to country. Although the university stands ready to help its students find out about requirements and changes in them, it is the student's responsibility to initiate the inquiry.

**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. Additional information on the university's emergency information systems can be found on the university's (<https://www.northeastern.edu/emergency-information/>) *Emergency Information* website.

**Equal Opportunity Policy.** Northeastern University does not discriminate on the basis of race, color, religion, genetic information, sex, gender, gender identity, sexual orientation, age, national origin, ancestry, disability, or veteran status in admission to, access to, treatment in, or employment in its programs and activities. In addition, Northeastern University will not condone any form of sexual harassment. Links to the university's nondiscrimination policies and its grievance procedures are available at the Office for University Equity and Compliance (<https://www.northeastern.edu/ouec/>). Inquiries regarding the university's nondiscrimination policies may be directed to:

Office for University Equity and Compliance (<https://www.northeastern.edu/ouec/>)  
125 Richards Hall  
Northeastern University  
Boston, Massachusetts 02115  
617.373.4644  
[ouec@northeastern.edu](mailto:ouec@northeastern.edu)

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

To educate students for a life of fulfillment and accomplishment.  
To create and translate knowledge to meet global and societal needs.

*Title IX.* Reports of Title IX prohibited offenses (sexual harassment, sexual assault, domestic violence, intimate partner violence, dating violence, stalking, or retaliation) involving students are addressed by the university's Policy on Rights and Responsibilities Under Title IX and separate procedures referenced in that policy that outline the investigation and resolution of claims of prohibited offenses. Reports of prohibited offenses can be submitted directly to the Title IX coordinator and the Office for University Equity and Compliance (OUEC) (<https://www.northeastern.edu/ouec/>) by completing the form available at Reporting to OUEC ([https://cm.maxient.com/reportingform.php?NortheasternUniv&#38;layout\\_id=7](https://cm.maxient.com/reportingform.php?NortheasternUniv&#38;layout_id=7)) or through any of the contact options listed below. OUEC's policy, as well as other helpful information, can be found at the OUEC website (<https://www.northeastern.edu/ouec/>).

Office for University Equity and Compliance (<https://www.northeastern.edu/ouec/>)

125 Richards Hall  
Northeastern University  
Boston, Massachusetts 02115  
617.373.4644  
[ouec@northeastern.edu](mailto:ouec@northeastern.edu)

*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 discussed in this section of the catalog (<http://catalog.northeastern.edu/graduate/academic-policies-procedures/ferpa/>).

*Clery Act.* Northeastern is committed to assisting all members of the university community in providing for their own safety and security. Information regarding campus security and personal safety, including topics such as crime prevention, university police law enforcement authority, crime reporting policies, crime statistics for the most recent three-year period, and disciplinary procedures, is available 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 2019, the persistence rate for undergraduate students who entered in the fall 2018 cohort was 96.2 percent.

*Mission Statement:*



About Sample Curricula .....	52	Architectural Science and Systems, Minor .....	73
Academic Honors .....	26	Architectural Studies and Design, BS .....	59
Academic Integrity Policy .....	27	Architectural Studies and Design, BS .....	59
Academic Policies and Procedures .....	26	Architectural Studies, BS .....	56
Academic Progression Standards .....	27	Architecture and English, BS .....	61
Accelerated Bachelor/Graduate Degree Programs .....	258	Architecture and English, BS .....	61
Accelerated Bachelor/Graduate Degree Programs .....	300	Architecture and Graphic and Information Design, BS .....	63
Accelerated Bachelor/Graduate Degree Programs .....	413	Architecture and Graphic and Information Design, BS .....	63
Accelerated Bachelor/Graduate Degree Programs .....	499	Architecture, BS .....	54
Accelerated Bachelor/Graduate Degree Programs .....	562	Argumentation and Law, Minor .....	186
Accelerated Bachelor/Graduate Degree Programs .....	756	Army, Air Force, and Navy Reserve Officers' Training Corps (ROTC) Programs .....	51
Accelerated Bachelor/Graduate Degree Programs .....	1172	Art + Design .....	74
Accommodations for Students with Disabilities .....	19	Art, BA .....	76
Accommodations for Students with Disabilities .....	28	Art History, Minor .....	127
Accounting .....	286	Art, Minor .....	126
Additional Requirements for BA Students .....	45	Asian Studies .....	767
Admission .....	11	Asian Studies, BA .....	767
Admission Policy and Entrance Requirements .....	11	Attendance Requirements .....	28
African Studies, Minor .....	817	Bachelor of Science in Business Administration, BSBA .....	259
Africana Studies, BA .....	798	Bachelor of Science in International Business, BSIB .....	261
Africana Studies, BS .....	808	Behavioral Neuroscience .....	564
Africana Studies, Minor .....	817	Behavioral Neuroscience and Design, BS .....	91
American Political Institutions, Minor .....	1129	Behavioral Neuroscience and Design, BS .....	91
American Sign Language and Human Services, BS .....	811	Behavioral Neuroscience and Philosophy, BS .....	569
American Sign Language and Human Services, BS .....	811	Behavioral Neuroscience and Philosophy, BS .....	569
American Sign Language and Linguistics, BS .....	618	Behavioral Neuroscience, BS .....	564
American Sign Language and Linguistics, BS .....	618	Behavioral Neuroscience, Minor .....	577
American Sign Language and Psychology, BS .....	735	Bill Payment .....	22
American Sign Language and Psychology, BS .....	735	Biochemical Engineering, Minor .....	437
American Sign Language and Theatre, BS .....	241	Biochemistry .....	577
American Sign Language and Theatre, BS .....	241	Biochemistry, BS .....	578
American Sign Language, BS .....	810	Biochemistry, Minor .....	590
American Sign Language, Minor .....	817	Bioengineering .....	418
Animation, Minor .....	126	Bioengineering and Biochemistry, BSBioE .....	423
Appendix .....	1214	Bioengineering and Biochemistry, BSBioE .....	423
Applied Physics, BS .....	705	Bioengineering, BSBioE .....	419
Applied Psychology .....	510	Biology .....	591
Arabic, Minor .....	818	Biology and English, BS .....	599
Architectural and Urban History, Minor .....	73	Biology and English, BS .....	599
Architectural Engineering, Minor .....	456		

Biology and Mathematics, BS .....	601	Communication and Media Studies, BA .....	135
Biology and Mathematics, BS .....	601	Communication Sciences and Disorders .....	512
Biology and Political Science, BS .....	603	Communication Studies .....	133
Biology and Political Science, BS .....	603	Communication Studies and Graphic and Information Design, BA .....	103
Biology, BS .....	592	Communication Studies and Graphic and Information Design, BA .....	103
Biology, Minor .....	610	Communication Studies and Media and Screen Studies, BA .....	139
Biomechanical Engineering, Minor .....	498	Communication Studies and Sociology, BA .....	141
Biomedical Engineering, Minor .....	480	Communication Studies and Sociology, BA .....	141
Biomedical Physics, BS .....	706	Communication Studies and Speech-Language Pathology and Audiology, BS .....	176
Black Feminist Studies, Minor .....	818	Communication Studies and Speech-Language Pathology and Audiology, BS .....	176
Bouvé College of Health Sciences .....	500	Communication Studies and Theatre, BA .....	143
Business Administration .....	294	Communication Studies and Theatre, BA .....	143
Business Administration and Communication Studies, BS .....	172	Communication Studies, BA .....	134
Business Administration and Communication Studies, BS .....	172	Communication Studies, Minor .....	186
Business Administration and Design, BS .....	94	Communications Sciences and Disorders, Minor .....	517
Business Administration and Design, BS .....	94	Computational Data Analytics, Minor .....	481
Business Administration and Psychology, BS .....	268	Computational Social Science, Minor .....	760
Business Administration and Psychology, BS .....	268	Computer Engineering and Computer Science, BSCompE .....	317
Business Analytics .....	295	Computer Engineering and Computer Science, BSCompE .....	317
Cell and Molecular Biology, BS .....	595	Computer Engineering and Physics, BSCompE .....	463
Chemical Engineering .....	427	Computer Engineering and Physics, BSCompE .....	463
Chemical Engineering and Biochemistry, BSCHE .....	432	Computer Engineering, BSCompE .....	459
Chemical Engineering and Biochemistry, BSCHE .....	432	Computer Engineering, Minor .....	481
Chemical Engineering and Physics, BSCHE .....	435	Computer Science .....	301
Chemical Engineering and Physics, BSCHE .....	435	Computer Science and Behavioral Neuroscience, BS .....	320
Chemical Engineering, BSCHE .....	428	Computer Science and Behavioral Neuroscience, BS .....	320
Chemistry and Chemical Biology .....	611	Computer Science and Biology, BS .....	322
Chemistry, BS .....	611	Computer Science and Biology, BS .....	322
Chemistry, Minor .....	615	Computer Science and Business Administration, BS .....	269
Chinese, Minor .....	819	Computer Science and Business Administration, BS .....	269
Cinema Studies, Minor .....	186	Computer Science and Cognitive Psychology, BS .....	331
Civil and Environmental Engineering .....	438	Computer Science and Cognitive Psychology, BS .....	331
Civil Engineering and Architectural Studies, BSCE .....	64	Computer Science and Communication Studies, BS .....	174
Civil Engineering and Architectural Studies, BSCE .....	64	Computer Science and Communication Studies, BS .....	174
Civil Engineering, BSCE .....	438	Computer Science and Criminal Justice, BS .....	336
Civil Engineering, Minor .....	457	Computer Science and Criminal Justice, BS .....	336
College Expenses .....	21	Computer Science and Design, BS .....	96
College of Arts, Media and Design .....	53	Computer Science and Design, BS .....	96
College of Engineering .....	413	Computer Science and Economics, BS .....	341
College of Science .....	562	Computer Science and Economics, BS .....	341
College of Social Sciences and Humanities .....	756	Computer Science and English, BS .....	343
Combined Majors .....	264	Computer Science and English, BS .....	343

Computer Science and Environmental Science, BS .....	346	Criminal Justice and Sociology, BS .....	791
Computer Science and Environmental Science, BS .....	346	Criminal Justice and Sociology, BS .....	791
Computer Science and Game Development, BS .....	99	Criminal Justice, BS .....	779
Computer Science and Game Development, BS .....	99	Criminal Justice, Minor .....	797
Computer Science and History, BS .....	351	Cultural Anthropology and Theatre, BA .....	244
Computer Science and History, BS .....	351	Cultural Anthropology and Theatre, BA .....	244
Computer Science and Journalism, BS .....	199	Cultural Anthropology, BA .....	1132
Computer Science and Journalism, BS .....	199	Cultural Anthropology, BS .....	1157
Computer Science and Linguistics, BS .....	356	Cultural Anthropology, Minor .....	1171
Computer Science and Linguistics, BS .....	356	Cultures, Societies, and Global Studies .....	797
Computer Science and Mathematics, BS .....	358	Cybersecurity .....	310
Computer Science and Mathematics, BS .....	358	Cybersecurity and Business Administration, BS .....	274
Computer Science and Media Arts, BS .....	100	Cybersecurity and Business Administration, BS .....	274
Computer Science and Media Arts, BS .....	100	Cybersecurity and Criminal Justice, BS .....	380
Computer Science and Music with Concentration in Music Technology, BS .....	218	Cybersecurity and Criminal Justice, BS .....	380
Computer Science and Music with Concentration in Music Technology, BS .....	218	Cybersecurity and Economics, BS .....	382
Computer Science and Music with Concentration in Music Technology, BS .....	218	Cybersecurity and Economics, BS .....	382
Computer Science and Philosophy, BS .....	366	Cybersecurity, BS .....	310
Computer Science and Philosophy, BS .....	366		
Computer Science and Physics, BS .....	368	D'Amore-McKim School of Business .....	258
Computer Science and Physics, BS .....	368	Data Science .....	313
Computer Science and Political Science, BS .....	371	Data Science and Behavioral Neuroscience, BS .....	388
Computer Science and Political Science, BS .....	371	Data Science and Behavioral Neuroscience, BS .....	388
Computer Science and Sociology, BS .....	375	Data Science and Biochemistry, BS .....	384
Computer Science and Sociology, BS .....	375	Data Science and Biochemistry, BS .....	384
Computer Science, BACS .....	305	Data Science and Biology, BS .....	386
Computer Science, BSCS .....	302	Data Science and Biology, BS .....	386
Computer Science, Minor .....	308	Data Science and Business Administration, BS .....	276
Concentrations .....	286	Data Science and Business Administration, BS .....	276
Consulting .....	295	Data Science and Ecology and Evolutionary Biology, BS .....	393
Cooperative Education .....	46	Data Science and Ecology and Evolutionary Biology, BS .....	393
Corporate Innovation and Venture .....	287	Data Science and Economics, BS .....	396
Corporate Innovation and Venture .....	296	Data Science and Economics, BS .....	838
Course Credit Guidelines .....	29	Data Science and Environmental Science, BS .....	398
Creative Fabrication, Minor .....	128	Data Science and Environmental Science, BS .....	398
Criminal Justice and Journalism, BS .....	201	Data Science and Health Science, BS .....	400
Criminal Justice and Journalism, BS .....	201	Data Science and Health Science, BS .....	400
Criminal Justice and Philosophy, BS .....	786	Data Science and Health Science, BS .....	400
Criminal Justice and Philosophy, BS .....	786	Data Science and Journalism, BS .....	203
Criminal Justice and Political Science, BS .....	787	Data Science and Journalism, BS .....	203
Criminal Justice and Political Science, BS .....	787	Data Science and Linguistics, BS .....	404
Criminal Justice and Political Science, BS .....	787	Data Science and Linguistics, BS .....	404
Criminal Justice and Psychology, BS .....	741	Data Science and Mathematics, BS .....	407
Criminal Justice and Psychology, BS .....	741		

Data Science and Mathematics, BS .....	407	English and Criminal Justice, BA .....	771
Data Science and Physics, BS .....	409	English and Criminal Justice, BA .....	771
Data Science and Physics, BS .....	409	English and Cultural Anthropology, BA .....	866
Data Science and Psychology, BS .....	411	English and Cultural Anthropology, BA .....	866
Data Science and Psychology, BS .....	411	English and Graphic and Information Design, BA .....	105
Data Science, BS .....	313	English and Graphic and Information Design, BA .....	105
Data Science, Minor .....	315	English and Philosophy, BA .....	870
Degrees, Majors, and Minors .....	29	English and Philosophy, BA .....	870
Design and Innovation in Engineering, Minor .....	416	English and Political Science, BA .....	873
Design, BFA .....	79	English and Political Science, BA .....	873
Digital Communications, Minor .....	187	English and Theatre, BA .....	245
Digital Methods in the Humanities, Minor .....	761	English and Theatre, BA .....	245
		English, BA .....	854
Early Intervention, Minor .....	518	English, Minor .....	893
East Asian Studies, Minor .....	769	Entrepreneurial Engineering, Minor .....	415
Ecology and Evolutionary Biology, BS .....	661	Entrepreneurial Startups .....	287
Ecology and Evolutionary Biology, Minor .....	678	Entrepreneurial Startups .....	297
Economics .....	823	Entrepreneurship and Innovation .....	288
Economics and Business Administration, BS .....	279	Environmental and Sustainability Sciences, BS .....	651
Economics and Business Administration, BS .....	279	Environmental and Sustainability Sciences, Minor .....	679
Economics and Mathematics, BS .....	690	Environmental Chemistry, Minor .....	458
Economics and Mathematics, BS .....	690	Environmental Chemistry, Minor .....	458
Economics and Philosophy, BS .....	841	Environmental Chemistry, Minor .....	458
Economics and Philosophy, BS .....	841	Environmental Engineering and Health Science, BSEnVE .....	450
Economics and Psychology, BS .....	744	Environmental Engineering and Health Science, BSEnVE .....	450
Economics and Psychology, BS .....	744	Environmental Engineering and Landscape Architecture, BSEnVE .....	68
Economics, BA .....	824	Environmental Engineering and Landscape Architecture, BSEnVE .....	68
Economics, BS .....	833	Environmental Engineering, BSEnVE .....	447
Economics, Minor .....	853	Environmental Science and Chemistry, BS .....	613
Education .....	51	Environmental Science and Chemistry, BS .....	613
Electrical and Computer Engineering .....	458	Environmental Science and Landscape Architecture, BS .....	71
Electrical and Computer Engineering, BSEE or BSCompE .....	477	Environmental Science and Landscape Architecture, BS .....	71
Electrical Engineering and Music with concentration in Music Technology, BSEE .....	220	Environmental Science, BS .....	655
Electrical Engineering and Music with concentration in Music Technology, BSEE .....	220	Environmental Studies and Economics, BS .....	677
Electrical Engineering and Physics, BSEE .....	472	Environmental Studies and Economics, BS .....	677
Electrical Engineering and Physics, BSEE .....	472	Environmental Studies and History, BA .....	641
Electrical Engineering, BSEE .....	469	Environmental Studies and History, BA .....	641
Electrical Engineering, Minor .....	482	Environmental Studies and International Affairs, BA .....	642
Emerging Markets .....	296	Environmental Studies and International Affairs, BA .....	642
English .....	854	Environmental Studies and Philosophy, BA .....	646
English and Communication Studies, BA .....	145	Environmental Studies and Philosophy, BA .....	646
English and Communication Studies, BA .....	145	Environmental Studies and Political Science, BA .....	647
		Environmental Studies and Political Science, BA .....	647

Environmental Studies, BA .....	637	Graphic and Information Design and Mathematics, BS .....	113
Environmental Studies, Minor .....	679	Graphic and Information Design and Mathematics, BS .....	113
Ethics, Minor .....	1064	Graphic and Information Design, Minor .....	130
Ethnomusicology, Minor .....	230		
Exercise Science, Minor .....	501	Health, Humanities, and Society, Minor .....	502
Exercise Science, Minor .....	501	Health, Humanities, and Society, Minor .....	502
Experience Design, Minor .....	128	Health, Humanities, and Society, Minor .....	502
Experiential Learning .....	46	Health Psychology, Minor .....	503
Explore Program .....	49	Health Psychology, Minor .....	503
		Health Requirements—University Health and Counseling Services (UHCS)	
Faculty .....	1173	.....	19
Family Business .....	289	Health Research Methods, Minor .....	503
Family Business .....	297	Health Research Methods, Minor .....	503
Family Educational Rights and Privacy Act (FERPA) .....	31	Health Science and Business Administration, BS .....	280
Film and International Cultures, Minor .....	819	Health Science and Business Administration, BS .....	280
Film Production, Minor .....	187	Health Science and Business Administration, BS .....	280
Final Examinations and Related Policies on Other Exams and Final Term Papers/Projects .....	32	Health Science and Communication Studies, BS .....	177
Finance .....	289	Health Science and Communication Studies, BS .....	177
Financial Aid .....	21	Health Science and Psychology, BS .....	530
Financing Options .....	23	Health Science and Psychology, BS .....	530
Fintech .....	290	Health Science and Sociology, BS .....	508
First Year Engineering .....	415	Health Science and Sociology, BS .....	508
Food Systems Sustainability, Health, and Equity, Minor .....	762	Health Science and Sociology, BS .....	508
Foundation Year .....	15	Health Science, BS .....	519
French, Minor .....	821	Health Science, Minor .....	538
		Health Sciences .....	518
Game Art and Animation, BFA .....	108	Healthcare Management and Consulting .....	290
Game Art, Minor .....	129	Healthcare System Operations, Minor .....	498
Game Design and Music with Concentration in Music Technology, BS ..	112	Healthcare System Operations, Minor .....	498
Game Design and Music with Concentration in Music Technology, BS ..	112	Healthcare System Operations, Minor .....	498
Game Design, BFA .....	82	History .....	894
Game Design, Minor .....	129	History and Asian Studies, BA .....	768
General Information .....	1234	History and Asian Studies, BA .....	768
General Studies Program .....	52	History and Criminal Justice, BA .....	773
Geosciences, Minor .....	680	History and Criminal Justice, BA .....	773
German, Minor .....	820	History and Cultural Anthropology, BA .....	901
Global Business and Strategy .....	290	History and Cultural Anthropology, BA .....	901
Global Experience .....	47	History and Economics, BA .....	826
Global Fashion Studies, Minor .....	255	History and Economics, BA .....	826
Global Health, Minor .....	501	History and Economics, BS .....	846
Global Health, Minor .....	501	History and Economics, BS .....	846
Governing Boards and Officers of Northeastern .....	1215	History and English, BA .....	879
Graduation Requirements .....	32	History and English, BA .....	879
		History and Philosophy, BA .....	907

History and Philosophy, BA .....	907	International Affairs and Economics, BA .....	827
History and Political Science, BA .....	908	International Affairs and Economics, BA .....	827
History and Political Science, BA .....	908	International Affairs and History, BA .....	913
History and Religious Studies, BA .....	911	International Affairs and History, BA .....	913
History and Religious Studies, BA .....	911	International Affairs and International Business, BS .....	282
History, BA .....	895	International Affairs and International Business, BS .....	282
History, BS .....	918	International Affairs and Religious Studies, BA .....	985
History, Culture, and Law, BA .....	757	International Affairs and Religious Studies, BA .....	985
History, Minor .....	925	International Affairs, BA .....	947
Human Communication, Minor .....	187	International Affairs, Minor .....	1003
Human Movement Science, Minor .....	562	International Affairs with African Studies Concentration, BA .....	951
Human Services .....	925	International Affairs with Asian Studies Concentration, BA .....	953
Human Services and Communication Studies, BA .....	147	International Affairs with European Studies Concentration, BA .....	956
Human Services and Communication Studies, BA .....	147	International Affairs with Latin American Studies Concentration, BA ...	958
Human Services and Criminal Justice, BS .....	795	International Affairs with Middle East Studies Concentration, BA .....	960
Human Services and Criminal Justice, BS .....	795	International Business .....	291
Human Services and International Affairs, BA .....	927	International Security Studies, Minor .....	1129
Human Services and International Affairs, BA .....	927	Italian, Minor .....	820
Human Services and Sociology, BA .....	934		
Human Services and Sociology, BA .....	934	Japanese, Minor .....	821
Human Services and Sociology, BS .....	944	Jewish Studies .....	1006
Human Services and Sociology, BS .....	944	Jewish Studies and Religion, BA .....	1006
Human Services, BA .....	925	Jewish Studies and Religion, BA .....	1006
Human Services, BS .....	935	Jewish Studies, Minor .....	1009
Human Services, Minor .....	946	Journalism and English, BA .....	193
		Journalism and English, BA .....	193
Immersive Media, Minor .....	130	Journalism and Interaction Design, BS .....	114
Industrial Engineering, BSIE .....	484	Journalism and Interaction Design, BS .....	114
Industrial Engineering, Minor .....	498	Journalism and Political Science, BA .....	195
Information Ethics, Minor .....	1062	Journalism and Political Science, BA .....	195
Information for Entering Students .....	17	Journalism, BA .....	191
Information for International Students .....	18	Journalism Practice, Minor .....	207
Information Technology Services .....	19	Journalism Studies, Minor .....	208
Interaction Design, Minor .....	131		
Interdisciplinary .....	501	Khoury College of Computer Sciences .....	300
Interdisciplinary .....	755	Khoury Combined Majors .....	316
Interdisciplinary .....	757		
Interdisciplinary Minors .....	415	Landscape Architecture, BLA .....	58
International Affairs .....	947	Latino/a, Latin American, and Caribbean Studies, Minor .....	763
International Affairs and Criminal Justice, BA .....	775	Law and Public Policy, Minor .....	763
International Affairs and Criminal Justice, BA .....	775	Leadership and Human Capital .....	298
International Affairs and Cultural Anthropology, BA .....	974	Learning Goals .....	42
International Affairs and Cultural Anthropology, BA .....	974	Leaves of Absence and University Withdrawal .....	33
		Linguistics .....	616



Linguistics and Communication Studies, BA .....	149	Mechanical Engineering and Design, BSME .....	123
Linguistics and Communication Studies, BA .....	149	Mechanical Engineering and Physics, BSME .....	495
Linguistics and Cultural Anthropology, BS .....	624	Mechanical Engineering and Physics, BSME .....	495
Linguistics and Cultural Anthropology, BS .....	624	Mechanical Engineering, BSME .....	488
Linguistics and English, BA .....	632	Mechanical Engineering, Minor .....	499
Linguistics and English, BA .....	632	Media and Screen Studies and English, BA .....	154
Linguistics and Psychology, BS .....	626	Media and Screen Studies and English, BA .....	154
Linguistics and Psychology, BS .....	626	Media and Screen Studies and History, BA .....	157
Linguistics and Speech-Language Pathology and Audiology, BS .....	516	Media and Screen Studies and History, BA .....	157
Linguistics and Speech-Language Pathology and Audiology, BS .....	516	Media and Screen Studies and Journalism, BA .....	158
Linguistics, BS .....	617	Media and Screen Studies and Journalism, BA .....	158
Linguistics, Minor .....	635	Media and Screen Studies and Media Arts, BA .....	117
Living and Learning Communities .....	46	Media and Screen Studies and Media Arts, BA .....	117
		Media and Screen Studies and Philosophy, BA .....	161
Major CIP Codes .....	1217	Media and Screen Studies and Philosophy, BA .....	161
Management .....	291	Media and Screen Studies and Political Science, BA .....	163
Management Information Systems .....	292	Media and Screen Studies and Political Science, BA .....	163
Marine and Environmental Sciences .....	635	Media and Screen Studies and Sociology, BA .....	166
Marine Biology, BS .....	664	Media and Screen Studies and Sociology, BA .....	166
Marine Sciences, Minor .....	680	Media and Screen Studies and Theatre, BA .....	167
Marketing .....	292	Media and Screen Studies and Theatre, BA .....	167
Marketing .....	298	Media and Screen Studies and Theatre, BS .....	180
Marketing Analytics .....	293	Media and Screen Studies and Theatre, BS .....	180
Marketing Analytics .....	299	Media and Screen Studies, BA .....	153
Materials Science and Engineering, Minor .....	416	Media Arts and Communication Studies, BA .....	118
Mathematics .....	680	Media Arts and Communication Studies, BA .....	118
Mathematics and Business Administration, BS .....	282	Media Arts, BFA .....	83
Mathematics and Business Administration, BS .....	282	Media Production, Minor .....	188
Mathematics and Cultural Anthropology, BS .....	695	Media Screen Studies, Minor .....	188
Mathematics and Cultural Anthropology, BS .....	695	Merit Scholarships .....	16
Mathematics and Physics, BS .....	696	Middle East and Mediterranean Studies, Minor .....	1005
Mathematics and Physics, BS .....	696	Mindfulness Studies, Minor .....	511
Mathematics and Political Science, BS .....	697	Minors .....	294
Mathematics and Political Science, BS .....	697	Music .....	209
Mathematics and Psychology, BS .....	699	Music and Communication Studies with Concentration in Music Industry, BS .....	181
Mathematics and Psychology, BS .....	699	Music and Communication Studies with Concentration in Music Industry, BS .....	181
Mathematics and Sociology, BS .....	700	Music, BA .....	210
Mathematics and Sociology, BS .....	700	Music Composition, Minor .....	231
Mathematics, BA .....	681	Music Industry, Minor .....	232
Mathematics, BS .....	683	Music, Minor .....	231
Mathematics, Minor .....	702	Music Performance, Minor .....	232
Mechanical and Industrial Engineering .....	483	Music Recording, Minor .....	233
Mechanical Engineering and Design, BSME .....	123		

Music Technology, Minor .....	233	Political Science and Communication Studies, BS .....	184
Music with Concentration in Music Industry, BS .....	212	Political Science and Communication Studies, BS .....	184
Music with Concentration in Music Technology, BS .....	215	Political Science and Economics, BA .....	831
Musical Theatre, Minor .....	234	Political Science and Economics, BA .....	831
Musical Theatre, Minor .....	234	Political Science and Economics, BS .....	847
		Political Science and Economics, BS .....	847
NUpath .....	42	Political Science and Human Services, BA .....	931
Nursing, BSN .....	540	Political Science and Human Services, BA .....	931
Nursing, BSN—Accelerated Program for Second-Degree Students .....	547	Political Science and Human Services, BS .....	942
Nutrition, Minor .....	504	Political Science and Human Services, BS .....	942
Nutrition, Minor .....	504	Political Science and International Affairs, BA .....	990
		Political Science and International Affairs, BA .....	990
Oratory and Public Speaking, Minor .....	188	Political Science and Philosophy, BA .....	1036
Orientation for International Students .....	17	Political Science and Philosophy, BA .....	1036
		Political Science and Philosophy, BS .....	1057
Parent/Family Programs .....	18	Political Science and Philosophy, BS .....	1057
Performing Arts Administration, Minor .....	234	Political Science, BA .....	1065
Performing Arts Administration, Minor .....	234	Political Science, BS .....	1102
Personal Information .....	34	Political Science, Minor .....	1128
Pharmaceutical Sciences, BS .....	551	Politics, Philosophy, and Economics, BS .....	757
Pharmacy, PharmD .....	556	Politics, Philosophy, and Economics, BS .....	757
Pharmacy Studies, BS .....	554	Politics, Philosophy, and Economics, BS .....	757
Philosophy, BA .....	1010	Portuguese, Minor .....	822
Philosophy and Religion .....	1009	Prelaw Preparation .....	50
Philosophy, BS .....	1040	Premedical and Other Preprofessional Health Career Preparation .....	50
Philosophy, Minor .....	1063	Professional Presentation, Minor .....	189
Photography, Minor .....	131	Professional Presentation, Minor .....	189
Photojournalism, Minor .....	132	Psychology .....	730
Photojournalism, Minor .....	132	Psychology and Music, BS .....	228
Physical Therapy, Movement, and Rehabilitation Sciences .....	561	Psychology and Music, BS .....	228
Physics .....	702	Psychology, BS .....	730
Physics and Music with Concentration in Music Technology, BS .....	226	Psychology, Minor .....	754
Physics and Music with Concentration in Music Technology, BS .....	226	Public Health, Minor .....	539
Physics and Philosophy, BS .....	717	Public Safety .....	20
Physics and Philosophy, BS .....	717		
Physics, BS .....	703	Registration and Taking Courses .....	34
Physics, Minor .....	730	Religious Studies and Africana Studies, BA .....	801
Playwriting, Minor .....	256	Religious Studies and Africana Studies, BA .....	801
Political Communication, Minor .....	189	Religious Studies, BA .....	1017
Political Science .....	1065	Religious Studies, Minor .....	1063
Political Science and Business Administration, BS .....	284	Requirements .....	42
Political Science and Business Administration, BS .....	284	Research and Creative Activity .....	47
Political Science and Communication Studies, BA .....	169	Residential Life .....	19
Political Science and Communication Studies, BA .....	169		

Resources .....	1234	Student Evaluation of Courses (TRACE) .....	39
Rhetoric, Minor .....	190	Student Orientation .....	17
Rhetoric, Minor .....	190	Student Records, Transcripts, and Related Policies .....	39
Robotics, Minor .....	483	Student Right-to-Know Act .....	41
Robotics, Minor .....	483	Studio Art, BFA .....	88
Russian, Minor .....	822	Supply Chain Management .....	294
		Sustainable Business Practices .....	300
School of Architecture .....	53	Sustainable Energy Systems, Minor .....	417
School of Criminology and Criminal Justice .....	770		
School of Journalism .....	191	Theatre .....	235
School of Nursing .....	540	Theatre and Interaction Design, BA .....	120
School of Pharmacy .....	551	Theatre and Interaction Design, BA .....	120
Science and Technology Studies, Minor .....	1172	Theatre and Interaction Design, BS .....	121
Scientific Commercialization, Minor .....	755	Theatre and Interaction Design, BS .....	121
Service-Learning .....	47	Theatre, BA .....	236
Social Activism, Minor .....	190	Theatre, BS .....	238
Social Innovation and Entrepreneurship .....	293	Theatre, Minor .....	254
Social Innovation and Entrepreneurship .....	299	Theatre, Performance, and Social Change, Minor .....	258
Sociology and Anthropology .....	1129	Theatrical Design, Minor .....	257
Sociology and Cultural Anthropology, BA .....	1134	Tuition, Room, Board, and Fees Per Semester .....	23
Sociology and Cultural Anthropology, BS .....	1171		
Sociology and Environmental Studies, BA .....	651	Undergraduate .....	11
Sociology and Environmental Studies, BA .....	651	Undergraduate Degrees .....	52
Sociology and International Affairs, BA .....	995	Undergraduate Internships .....	53
Sociology and International Affairs, BA .....	995	University Academics .....	41
Sociology and Political Science, BA .....	1100	University Honors Program .....	14
Sociology and Political Science, BA .....	1100	University Honors Program .....	49
Sociology, BA .....	1130	University Leadership .....	1214
Sociology, BS .....	1155	University-Wide Requirements .....	46
Sociology, Minor .....	1172	Urban Landscape Studies, Minor .....	73
Songwriting, Minor .....	235	Urban Studies, Minor .....	765
Spanish and International Affairs, BA .....	804		
Spanish and International Affairs, BA .....	804	Video Arts, Minor .....	132
Spanish, BA .....	803		
Spanish, Minor .....	823	We Care .....	19
Specialized Entry Programs .....	15	Wellness Studies, Minor .....	550
Speech-Language Pathology and Audiology, BS .....	513	Women's, Gender, and Sexuality Studies, Minor .....	765
Speech-Language Pathology and Audiology, Minor .....	518	World Languages Center .....	49
Sports, Media, Communication, Minor .....	190	Writing, Minor .....	893
Sports, Media, Communication, Minor .....	190	Writing-Intensive Courses .....	45
Statements of Accreditation and State Authorization .....	1215		
Strategy .....	299		
Student Bill of Academic Rights and Responsibilities .....	37		