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.

Universitywide Requirements

All undergraduate students are required to complete the Universitywide 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/).

Computer Science Courses

Code	Title	Hours
Computer Science Overview		
CS 1200	First Year Seminar	1
or SOCL 1000	Sociology at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
or EESH 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 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
IS 2000	Principles of Information Science	4
Computer Science Writing-Intensive Requirement		
Complete one of the following:		4
CS 4500	Software Development	
or CS 4530	Fundamentals of Software Engineering	
DS 4200	Information Presentation and Visualization (Take DS 3000 either as a prerequisite of or concurrently with DS 4200.)	
IS 3500	Information System Design and Development	
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
Sociology Required Courses		
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
SOCL 1101	Introduction to Sociology	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
Sociology Electives		
Complete one sociology elective in each of the following ranges:		12
Introductory elective: SOCL 1000 to SOCL 1999		
Intermediate elective: SOCL 2000 to SOCL 3999		
Advanced elective: SOCL 4000 to SOCL 4999		
Sociology Required Capstone		
SOCL 4600	Senior Seminar	4

Integrative Course Requirement

Code	Title	Hours
Complete one of the following:		4
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

Computer Science Writing Requirement

Code	Title	Hours
College Writing		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	
Advanced Writing in the Disciplines		
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 Plan of Study:
Four Years, Two Co-ops in Spring/Summer 1

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200	1	ANTH 1101	4	CS 3200	4	Vacation	
CS 1800 and CS 1802	5	CS 2510 and CS 2511	5	CS 3500 and CS 3501	5		
CS 2500 and CS 2501	5	IS 2000	4				
ENGW 1111	4	SOCL 2320	4				
SOCL 1101	4						
	19		17		9		0

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305	4	Co-op		Co-op		ENGW 3302, 3308, or 3315	4
CS 1210	1					Elective	4
CS 3000	4						
SOCL 2321	4						
Elective	4						
	17		0		0		8

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Khoury elective 1	4	Co-op		Co-op		Elective	4
SOCL 3300	4					Elective	4
Sociology introductory elective	4						
Elective	4						
	16		0		0		8

Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours
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