

# 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

- Concentrations and course offerings may vary by campus and/or by program modality. Please consult with your advisor or admissions coach for the course availability each term at your campus or within your program modality.
- Certain options within the program may be *required* at certain campuses or for certain program modalities. Please consult with your advisor or admissions coach for requirements at your campus or for your program modality.

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, 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 (<https://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/>).

## NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (<https://catalog.northeastern.edu/undergraduate/university-academics/nupath/>).

## Computer Science Courses

Code	Title	Hours
<b>Computer Science Overview</b>		
CS 1200 or ENGL 1000	First Year Seminar English 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
<b>Computer Science Required Courses</b>		
CS 3000	Algorithms and Data	4
CS 3200	Introduction to Databases	4
CS 3500 and CS 3501	Object-Oriented Design and Lab for CS 3500	5
<b>Computing Focus</b>		
Students are required to complete one of the following foci (two courses total):		8
<i>Focus 1: Natural Language Processing</i>		
CS 3800	Theory of Computation	
CS 4120	Natural Language Processing	
<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	

**Computer Science/Information Science Elective Course**

Choose one:		4
CS 4500	Software Development	
or CS 4530	Fundamentals of Software Engineering	
IS 2000	Principles of Information Science	

**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 semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:

CS 2500 or higher, except CS 5010		4
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
<b>Foundational Courses</b>		
ENGL 1400	Introduction to Literary Studies	4
ENGL 1160	Introduction to Rhetoric	4
or ENGL 1410	Introduction to Research on Writing	
ENGL 1700	Global Literatures 1	4
or ENGL 1701	Global Literatures 2	

**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 course from the following. You may reuse this course to fulfill an additional English requirement below:		4
ENGL 2296	Early African-American Literature	
ENGL 2450	Postcolonial Literature	
ENGL 2455	American Women Writers	
ENGL 2470	Asian-American Literature	
ENGL 2760	Writing in Global Contexts	
ENGL 3678	Bedrooms and Battlefields: Hebrew Bible and the Origins of Sex, Gender, and Ethnicity	
ENGL 3685	Modern and Contemporary Jewish Literature	
<b>Literary Periods</b>		
<i>Pre-1850</i>		
Complete one course from the following:		4
ENGL 1500	British Literature to 1800	
ENGL 1502	American Literature to 1865	
ENGL 1600	Introduction to Shakespeare	
ENGL 2296	Early African-American Literature	
ENGL 2330	The American Renaissance	
ENGL 3101	Early Literatures	
ENGL 3120	17th- and 18th-Century Literatures	
ENGL 3160	Topics in 17th- and 18th-Century British Literatures	
ENGL 3619	Emerson and Thoreau	
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 4010	Topics in Shakespeare	
<i>Post-1850</i>		

Complete one of the following courses: 4

ENGL 2301	The Graphic Novel
ENGL 2420	Contemporary Poetry
ENGL 2430	Contemporary Fiction
ENGL 2440	The Modern Bestseller
ENGL 2450	Postcolonial Literature
ENGL 2451	Postcolonial Women Writers
ENGL 2455	American Women Writers
ENGL 2470	Asian-American Literature
ENGL 2600	Irish Literary Culture (Abroad)
ENGL 3161	20th- and 21st-Century Literatures
ENGL 3685	Modern and Contemporary Jewish Literature
or JWSS 3685	Modern and Contemporary Jewish Literature
ENGL 3730	20th- and 21st-Century Major Figure

### Theories and Methods

Complete one of the following: 4

ENGL 1140	Grammar: The Architecture of English
ENGL 1160	Introduction to Rhetoric
ENGL 1410	Introduction to Research on Writing
ENGL 1450	Reading and Writing in the Digital Age
ENGL 2510	Horror Fiction
ENGL 2520	Science Fiction
ENGL 2620	What Is Nature?
ENGL 2690	Boston in Literature
ENGL 3070	Literary Genres
ENGL 3325	Rhetoric of Law
ENGL 3381	The Practice and Theory of Teaching Writing
ENGL 3400	Opening the Archive
ENGL 3487	Film and Text (Abroad)
ENGL 3700	Narrative Medicine
ENGL 4100	Topics in Literary Criticism (reactivating for Fall 24)
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

### Major Seminar

ENGL 3710 Major Seminar 4

### Writing

Complete one of the following: 4

ENGL 2700	Creative Writing
ENGL 2710	Style and Editing
ENGL 2730	Digital Writing
ENGL 2740	Writing and Community Engagement
ENGL 2760	Writing in Global Contexts
ENGL 2770	Writing to Heal
ENGL 2850	Writing for Social Media: Theory and Practice
ENGL 3375	Writing Boston
ENGL 3376	Creative Nonfiction
ENGL 3377	Poetry Workshop
ENGL 3378	Fiction Workshop
ENGL 3380	Writing Seminar

ENGL 3384	The Writer's Marketplace	
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**English Electives**

Complete any two ENGL courses that have not already been used to fulfill another requirement. 8

**Capstone**

Code	Title	Hours
ENGL 4710	Capstone Seminar	4

**Integrative Course Requirement**

This course will not be allowed to double-count in the Theories and Methods section above.

Code	Title	Hours
ENGL 3340	Technologies of Text	4
or HIST 1357	History of Information in the United States: Media, Technology, Law	

**Supporting Course**

Code	Title	Hours
Complete one of the following:		4

AFCS 2600	Issues in Race, Science, and Technology	
CY 4170	The Law, Ethics, and Policy of Data and Digital Technologies	
CY 5240	Cyberlaw: Privacy, Ethics, and Digital Rights	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
IS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Technology and Society	

**Computer Science Writing Requirement**

Code	Title	Hours
<b>College Writing</b>		
ENGW 1111	First-Year Writing	4
or ENGW 1102	First-Year Writing for Multilingual Writers	

**Advanced Writing in the Disciplines**

Complete one course from the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3309	Advanced Writing in the Humanities	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	

**Required General Electives**

Code	Title	Hours
Complete 28 semester hours of general electives.		28

**Khoury College GPA Requirement**

Minimum cumulative 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

137 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	Hours
CS 1200		1 CS 2510 and CS 2511		5 CS 3500 and CS 3501		5 CS 3000		4
CS 1800 and CS 1802		5 ENGL 1160 or 1410		4 Elective		4 Elective		4
CS 2500 and CS 2501		5 Pre-1850 Literature		4				
ENGL 1400		4 Elective		4				
ENGW 1111		4						
		<b>19</b>		<b>17</b>		<b>9</b>		<b>8</b>
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
CS 1210		1 Co-op		0 Co-op		0 Elective		4
CS 3200		4				Elective		4
ENGL 1700 or 1701		4						
Post-1850 Literature		4						
ENGL Theories & Methods		4						
		<b>17</b>		<b>0</b>		<b>0</b>		<b>8</b>
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
ENGL 3340 or HIST 1357		4 Co-op		0 Co-op		0 Elective		4
IS 2000, CS 4500, or CS 4530		4		ENGW 3302, 3309, or 3315		4 Elective		4
ENGL 3710		4						
Khoury elective		4						
		<b>16</b>		<b>0</b>		<b>4</b>		<b>8</b>
Year 4								
Fall	Hours	Spring	Hours	Hours	Hours	Hours	Hours	Hours
Computing & Social Issues		4 ENGL 4710		4				
Computing Focus 1		4 Computing Focus 2		4				
English Elective 1		4 English Diversity Requirement		4				
English Elective 2		4 Writing Requirement		4				
		<b>16</b>		<b>16</b>				

Total Hours: 138

#### FOUR YEARS, TWO CO-OPS IN SUMMER 2/FALL

Year 1								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	Hours
CS 1200		1 CS 2510 and CS 2511		5 CS 3500 and CS 3501		5 CS 3000		4
CS 1800 and CS 1802		5 ENGL 1160 or 1410		4 Elective		4 Elective		4

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CS 2500 and CS 2501	5	Pre-1850 Literature	4					
ENGL 1400	4	Elective	4					
ENGW 1111	4							
	<b>19</b>		<b>17</b>			<b>9</b>		<b>8</b>
<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 3200	4	CS 1210	1	Elective	4	Co-op		0
ENGL 1700 or 1701	4	ENGL 3340 or HIST 1357	4	Elective	4			
Post-1850 Literature	4	IS 2000, CS 4500, or CS 4530 (or English Category or Elective)	4					
ENGL Theories & Methods	4	ENGL 3710	4					
		Khoury elective	4					
	<b>16</b>		<b>17</b>			<b>8</b>		<b>0</b>
<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	Computing & social issues	4	Elective	4	Co-op		0
ENGW 3302, 3309, or 3315	4	Computing Focus 1	4	Elective	4			
		English Elective 1	4					
		English Elective 2	4					
	<b>4</b>		<b>16</b>			<b>8</b>		<b>0</b>
<b>Year 4</b>								
<b>Fall</b>	<b>Hours</b>	<b>Spring</b>	<b>Hours</b>					
Co-op	0	ENGL 4710	4					
		Computing Focus 2	4					
		English Diversity Requirement	4					
		Writing Requirement	4					
	<b>0</b>		<b>16</b>					

**Total Hours: 138**