Computer Science and Communication Studies, BS (Oakland)

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.

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
Computer Science Overview		
CS 1200	First Year Seminar	1
or COMM 1000	Communication Studies at Northeastern	
CS 1210	Professional Development for Khoury Co-op	1
or EEAM 2000	Professional Development for Co-op	
Computer Science Fundamental Courses		
All students can take a self-assessment to attempt to place out of CS 2000 and CS 2001. Students who place out of CS 2000 and CS 2001 will instead substitute 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not otherwise required in the degree.		
CS 1800 and CS 1802	Discrete Structures and Seminar for CS 1800	5
CS 2000 and CS 2001	Introduction to Program Design and Implementation and Lab for CS 2000	5
CS 2100 and CS 2101	Program Design and Implementation 1 and Lab for CS 2100	5
Computer Science Required Courses		
CS 3000	Algorithms and Data	4
CS 3100 and CS 3101	Program Design and Implementation 2 and Lab for CS 3100	5
CS 3200	Introduction to Databases	4
CS 4530	Fundamentals of Software Engineering	4
or CS 4535	Professional Practicum Capstone	
CS 4550	Web Development	4
Khoury Approved Electives		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 8 semester hours from within the following options:		8
CS 2500 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
MKTG 4606	Digital, Analytics, Technology, and Automation Research Practicum	

Communication Studies Courses

Code	Title	Hours
Communication Studies Common Requirements		
COMM 1101	Introduction to Communication Studies	4

| COMM 1112 | Public Speaking | 4 |
| or COMM 2301 | Communication Research Methods | |

Foundation Course

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 3415	Communication Criticism	
COMM 3445	Public Relations Principles	
COMM 3500	Environmental Issues, Communication, and the Media	
COMM 3501	Free Speech: Law and Practice	
COMM 3530	Communication and Sexualities	
COMM 3532	Theories of Conflict and Negotiation	
COMM 4535	Nonverbal Social Interaction	
COMM 4605	Youth and Communication Technology	
COMM 4631	Crisis Communication and Image Management	

Communication Studies Electives

Complete three courses in the following range: [1]		12
COMM 1131 to COMM 4996		

[1]   Junior/Senior Honors Project 1 (COMM 4970) is excluded.

Supporting Courses

Code	Title	Hours
Mathematics		
MATH 1341	Calculus 1 for Science and Engineering	4
Computing and Social Issues		
Complete one of the following:		4
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	
DS 1300	Knowledge in a Digital World	
or PHIL 1300	Knowledge in a Digital World	
HIST 2220	History of Technology	
INSH 2102	Bostonography: The City through Data, Texts, Maps, and Networks	
JRNL 3700	Data Storytelling	
PHIL 1145	Technology and Human Values	
SOCL 1280	The Twenty-First-Century Workplace	

SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Technology and Society	

Writing Requirements

Code	Title	Hours
College Writing		
ENGW 1111	First-Year Writing	4
Advanced Writing in the Disciplines		
Complete one of the following:		4
ENGW 3302	Advanced Writing in the Technical Professions	
ENGW 3314	Advanced Writing in the Arts, Media, and Design	
ENGW 3315	Interdisciplinary Advanced Writing in the Disciplines	
COMM 3409	Advocacy Writing [2]	

[2]   If Advocacy Writing (COMM 3409) is selected it will also satisfy a communication studies elective requirement. One additional general elective will be then required in its place.

Integrative Course

Code	Title	Hours
CS 4120	Natural Language Processing	4

Required General Electives

Code	Title	Hours
Complete 32 semester hours of general electives.		32

NUpath Requirements Satisfied

- Advanced Writing in the Disciplines
- Analyzing and Using Data
- Conducting Formal and Quantitative Reasoning
- Demonstrating Thought and Action in a Capstone
- Employing Ethical Reasoning
- Engaging with the Natural and Designed World
- Understanding Societies and Institutions
- Writing in the First Year
- Writing-Intensive in the Major

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 cumulative 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 First Half

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours
COMM 1101	4	COMM 1112 or 2301	4	CS 3100 and CS 3101	5
CS 1200 or COMM 1000	1	CS 2100 and CS 2101	5	General Elective	4

	Hours		Hours		Hours		Hours
CS 1800 and CS 1802	5	CS 3200	4				
CS 2000 and CS 2001	5	General Elective	4				
ENGW 1111	4						
	19		**17**		**9**		

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1210 or EEAM 2000	1	Co-op	0	Co-op	0	General Elective	4
CS 3000	4					General Elective	4
MATH 1341	4						
Communication Studies Foundation Course	4						
Khoury Elective	4						
	17		**0**		**0**		**8**

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Communication Studies Cluster Course	4	Co-op	0	Co-op	0	ENGW 3302, 3314, or 3315	4
Communication Studies Writing Intensive Course	4					General Elective	4
Communication Studies Elective	4						
Khoury Elective	4						
	16		**0**		**0**		**8**

Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours
CS 4120	4	CS 4550	4	Elective	4
CS 4530 or 4535	4	Communication Studies Elective	4	Elective	4
Communication Studies Writing Intensive Course	4	Computing and Social Issues	4		
Communication Studies Elective	4	General Elective	4		
	16		**16**		**8**

Total Hours: 134

Sample Pattern, Four Years, Two Co-ops in Summer Second Half/Fall

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours
COMM 1101	4	COMM 1112 or 2301	4	CS 3100 and CS 3101	5
CS 1200 or COMM 1000	1	CS 2100 and CS 2101	5	General Elective	4
CS 1800 and CS 1802	5	CS 3200	4		
CS 2000 and CS 2001	5	GeneralElective	4		
ENGW 1111	4				
	19		**17**		**9**

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 3000	4	CS 1210 or EEAM 2000	1	General Elective	4	Co-op	0
MATH 1341	4	Communication Studies Cluster Course	4	General Elective	4		

	Hours		Hours		Hours		Hours
Communication Studies Foundation Course	4	Communication Studies Writing Intensive Course	4				
Khoury Elective	4	Communication Studies Elective	4				
		Khoury Elective	4				
	16		**17**		**8**		**0**

Year 3

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
Co-op	0	CS 4120	4	ENGW 3302, 3314, or 3315	4	Co-op	0
		CS 4530 or 4535	4	General Elective	4		
		Communication Studies Writing Intensive Course	4				
		Communication Studies Elective	4				
	0		**16**		**8**		**0**

Year 4

Fall	Hours	Spring	Hours	Summer 1	Hours	
Co-op	0	CS 4550	4	Elective	4	
		Communication Studies Elective	4	Elective	4	
		Computing and Social Issues	4			
		General Elective	4			
	0		**16**		**8**	

Total Hours: 134