

Artificial Intelligence and Communication Studies, BS (Boston)

The degree in artificial intelligence and communication studies offers an integrative curriculum in the study of communication skills 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. Students have an opportunity to gain 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/general-education-requirements/#nupathtext>).

Artificial Intelligence Courses

Code	Title	Hours
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 with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not otherwise required in the degree.		
CS 1800	Discrete Structures	4
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
CS 3200	Introduction to Databases	4
DS 3500	Advanced Programming with Data	4
Artificial Intelligence Foundations		
DS 3000	Mathematical Foundations of Artificial Intelligence	4
DS 4200	Information Presentation and Visualization	4
DS 4300	Large-Scale Information Storage and Retrieval	4
DS 4400	Machine Learning	4
DS 4420 or DS 4440	Advanced Machine Learning Modern Neural Networks	4
Khoury Approved Elective		
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.		
Complete 4 semester hours from within the following options:		4
CS 2300 or higher, except CS 5010		
CY 2000 or higher, except CY 4930		
DS 2500 or higher, except DS 4900		
EECE 2160	Embedded Design: Enabling Robotics	
EECE 2322 and EECE 2323	Fundamentals of Digital Design and Computer Organization and Lab for EECE 2322	
MKTG 4606	Digital, Analytics, Technology, and Automation Research Practicum	

Communication Studies Requirements

Code	Title	Hours
Common Requirements		
COMM 1101	Introduction to Communication Studies	4
COMM 1112	Public Speaking	4

or COMM 2301 Communication Research Methods

Foundation Course

Complete 4 semester hours 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 4 semester hours 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 Courses

Complete 8 semester hours from 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 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 12 semester hours from the following: 12

COMM courses between COMM 1100-4999, which have not been used to satisfy other degree requirements	
JRNL 2301	Visual Storytelling in Journalism
MSCR 1320	Media and Social Change
MSCR courses in the ranges MSCR 2100-2199, MSCR 3100-3199, and MSCR 4100-4199	
PREL 1425	Public Relations Principles
PREL 3625	Public Relations Practice

Integrative Requirement Courses

Code	Title	Hours
Complete 8 semester hours from the following:		
COMM 2625	Communication, Technology, and Society	4
or COMM 2941	Topics in Communication and Technology	
CS 4120	Natural Language Processing	4

Capstone Experience Course

Code	Title	Hours
Complete 4 semester hours from the following:		
COMM 4608	Strategic Communication Capstone	4
or COMM 4625	Online Communities	
or COMM 4901	Seminar in Communications	

Supporting Courses

Code	Title	Hours
Introduction to College		
COMM 1000 or CS 1200 or INPR 1000	Communication Studies at Northeastern First Year Seminar First-Year Interdisciplinary Seminar	1
Experiential Learning		
CS 1210 or EEAM 2000	Professional Development for Khoury Co-op Professional Development for Co-op	1
Mathematics		
ECON 2350	Statistics for Economists	4
MATH 1341	Calculus 1 for Science and Engineering	4
Computing and Social Issues		
Complete 4 semester hours from 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 or PHIL 1300	Knowledge in a Digital World Knowledge in a Digital World	
HIST 2220	History of Technology	
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 2485	Environment, Technology, and Society	
SOCL 4528	Technology and Society	
Writing Requirements		
<i>First-Year Writing</i>		
ENGW 1111 or ENGW 1102 or ENGW 1114	First-Year Writing First-Year Writing for Multilingual Writers First-Year Writing with Service-Learning	4
<i>Advanced Writing in the Disciplines</i>		
COMM 3409 or ENGW 3302 or ENGW 3314 or ENGW 3315	Advocacy Writing Advanced Writing in the Technical Professions Advanced Writing in the Arts, Media, and Design Interdisciplinary Advanced Writing in the Disciplines	4

Required General Electives

Code	Title	Hours
Complete a minimum of 16 semester hours of general electives.		16

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
- Interpreting Culture
- 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 2 grades below a C in COMM courses may be used to satisfy degree requirements.

Program Requirement

128 total semester hours required