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 (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

**Computer Science Overview**
- CS 1200  Computer Science/Information Science Overview 1
- CS 1210  Computer Science/Information Science Overview 2: Co-op Preparation

**Computer Science Fundamental Courses**
A grade of C– or higher is required:
- CS 1800  Discrete Structures and Seminar for CS 1800
- CS 2500  Fundamentals of Computer Science 1 and Lab for CS 2500
- CS 2510  Fundamentals of Computer Science 2 and Lab for CS 2510

**Computer Science Required Courses**
- CS 3500  Object-Oriented Design
- CS 4100  Artificial Intelligence (Integrative course)
- CS 4500  Software Development (Integrative course)
- CS 4800  Algorithms and Data
- IS 4300  Human Computer Interaction (integrative course)

**Computer Science Senior Seminar**
- THTR 1170  The Eloquent Presenter

**Computer Science Elective Courses**
With advisor approval, directed study, project study, and appropriate graduate-level courses may also be taken as computer science electives.

Complete three courses in the following ranges:

- CS 2500 or higher, except CS 5010
- IS 2000 or higher, except IS 4900
- DS 2000 or higher, except DS 4900

### Psychology Courses

**Required Courses**
- 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  Sensation and Perception 4
  or PSYC 3458  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 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 4526  Categorization and Reasoning
- PSYC 4610  Laboratory in Psycholinguistics
- PSYC 4612  Laboratory in Cognition
- PSYC 4622  Laboratory in Sensation and Perception
- PSYC 4652  Seminar in Ethics in Psychology
- PSYC 4658  Seminar in Psycholinguistics
- PSYC 4660  Seminar in Cognition
- PSYC 4668  Seminar in Sensation and Perception
- PSYC 4674  Seminar in Cognitive Neuroscience

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
Supporting Courses

Calculus
A grade of C– or higher is required:
MATH 1341 Calculus 1 for Science and Engineering 4

Computing and Social Issues
Complete one of the following:
PHIL 1145 Technology and Human Values 4
SOCL 1280 The 21st-Century Workplace 4
SOCL 3485 Environment, Technology, and Society 4
SOCL 4528 Computers and Society 4
ANTH 3418 Wired/Unwired: Cybercultures and Technopolitics 4
IA 5240 Cyberlaw: Privacy, Ethics, and Digital Rights 4
INSH 2102 Bostonography: The City through Data, Texts, Maps, and Networks 4

Computer Science Writing Requirement

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 4

Required General Electives
Complete eight general electives. 32

Major GPA Requirement
Minimum 2.000 GPA required in all CS 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
132 total semester hours required

Plan of Study

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

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<th>Hours</th>
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Five Years, Three Co-ops in Summer 2/Fall

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Total Hours: 134

Five Years, Three Co-ops in Spring/Summer 1

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