# Computer Science and Journalism, BS (Boston)

The computer science and journalism combined major supports students who understand that journalism now takes place in both print and the digital world. Students will learn the principles, practices, and responsibilities of the journalism profession while gaining a deep understanding of the systems and technologies that support digital media.

## 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 Requirements

| Code | Title | Hours |
| --- | --- | --- |
| **Computer Science Overview** | | |
| Must be taken in alignment with your home college: | | |
| CS 1200 | First Year Seminar | 1 |
| or JRNL 1000 | Journalism 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 4220 | Information Retrieval | 4 |
| or CS 2484 | Principles of Human-Computer Interaction | |
| CS 4530 | Fundamentals of Software Engineering | 4 |
| or CS 4535 | Professional Practicum Capstone | |
| **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 12 semester hours from within the following options: | | 12 |
| 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 | |

## Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-semester hours journalism courses at Northeastern, and these must include:

| Code | Title | Hours |
|------|-------|-------|
| JRNL 2201 | Journalism 2: Intermediate Reporting | |
| JRNL 2301 | Visual Storytelling in Journalism | |
| JRNL 4650 | Ethics and Diversity in the News Media | |

| Code | Title | Hours |
|------|-------|-------|
| **Journalism Courses** | | |
| A grade of C or higher is required. | | |
| JRNL 1101 and JRNL 1102 | Journalism 1: Fundamentals of Reporting and Writing and Journalist's Toolbox | 5 |
| JRNL 2201 | Journalism 2: Intermediate Reporting | 4 |
| JRNL 2301 | Visual Storytelling in Journalism | 4 |
| JRNL 3610 | Digital Storytelling and Social Media | 4 |
| **Required Journalism** | | |
| JRNL 1150 | Understanding Today's News | 4 |
| JRNL 2350 | The History of Journalism: How the News Became the News | 4 |
| JRNL 3550 | The First Amendment and the Media | 4 |
| JRNL 4650 | Ethics and Diversity in the News Media | 4 |
| **Journalism Electives** | | |
| Complete two JRNL courses. | | 8 |
| **Journalism-Related Requirement** | | |
| HIST 1130 | Introduction to the History of the United States | 4 |

## Supporting Courses

| Code | Title | Hours |
|------|-------|-------|
| **Mathematics Requirement** | | |
| 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 Requirement

| Code | Title | Hours |
|------|-------|-------|
| **College Writing** | | |
| ENGW 1111 | First-Year Writing | 4 |
| **Advanced Writing in the Disciplines** | | |
| This course already fulfills a Journalism requirement above. | | |
| JRNL 2301 | Visual Storytelling in Journalism | |

## Required General Electives

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

## NUpath Requirements Satisfied

- Engaging with the Natural and Designed World
- Exploring Creative Expression and Innovation
- Conducting Formal and Quantitative Reasoning
- Analyzing and Using Data
- Understanding Societies and Institutions
- Interpreting Culture
- Engaging Difference and Diversity
- Employing Ethical Reasoning
- 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.

## Khoury College GPA Requirement

Minimum cumulative 2.000 GPA required in all CS, CY, DS, IS courses

## Journalism GPA Requirement

Minimum 2.000 GPA required in all JRNL courses

## Program Requirement

134 total semester hours required

## Plan of Study
## Sample Plans of Study

**FOUR YEARS, TWO CO-OPS IN SUMMER SECOND HALF/FALL**

**Year 1**

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|---|---|---|---|---|---|---|---|
| CS 1200 | 1 | CS 2100 and CS 2101 | 5 | CS 3000 | 4 | General Elective | 4 |
| CS 1800 and CS 1802 | 5 | CS 3200 | 4 | General Elective | 4 | General Elective | 4 |
| CS 2000 and CS 2001 | 5 | JRNL 1101 and JRNL 1102 | 5 | | | | |
| ENGW 1111 | 4 | JRNL 2350 | 4 | | | | |
| JRNL 1150 | 4 | EEAM 2000 (For CAMD students) | 1 | | | | |
| | **19** | | **19** | | **8** | | **8** |

**Year 2**

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|---|---|---|---|---|---|---|---|
| CS 3100 and CS 3101 | 5 | CS 1210 (For Khoury students) | 1 | General Elective | 4 | Co-op | 0 |
| HIST 1130 | 4 | JRNL 2301 | 4 | General Elective | 4 | | |
| JRNL 2201 | 4 | MATH 1341 | 4 | | | | |
| Khoury Elective | 4 | Journalism elective 2 | 4 | | | | |
| | | Khoury Elective | 4 | | | | |
| | **17** | | **17** | | **8** | | **0** |

**Year 3**

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|---|---|---|---|---|---|---|---|
| Co-op | 0 | CS 4220 or 2484 | 4 | General Elective | 4 | Co-op | 0 |
| | | JRNL 3550 | 4 | General Elective | 4 | | |

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|---|---|---|---|---|---|---|---|
|  |  | JRNL 3610 | 4 |  |  |  |  |
|  |  | Khoury Elective | 4 |  |  |  |  |
| **0** |  | **16** |  | **8** |  | **0** |  |

**Year 4**

| Fall | Hours | Spring | Hours |
|---|---|---|---|
| Co-op | 0 | CS 4530 or 4535 | 4 |
|  |  | JRNL 4650 | 4 |
|  |  | Computing and social issues | 4 |
|  |  | Journalism elective 2 | 4 |
| **0** |  | **16** |  |

**Total Hours: 136**

## FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER FIRST HALF

**Year 1**

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|---|---|---|---|---|---|---|---|
| CS 1200 | 1 | CS 2100 and CS 2101 | 5 | CS 3100 and CS 3101 | 5 | General Elective | 4 |
| CS 1800 and CS 1802 | 5 | CS 3200 | 4 | General Elective | 4 | General Elective | 4 |
| CS 2000 and CS 2001 | 5 | JRNL 1101 and JRNL 1102 | 5 |  |  |  |  |
| ENGW 1111 | 4 | JRNL 2350 | 4 |  |  |  |  |
| JRNL 1150 | 4 |  |  |  |  |  |  |
|  | **19** |  | **18** |  | **9** |  | **8** |

**Year 2**

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|---|---|---|---|---|---|---|---|
| CS 1210 | 1 | Co-op | 0 | Co-op | 0 | General Elective | 4 |
| CS 3000 | 4 |  |  |  |  | General Elective | 4 |
| HIST 1130 | 4 |  |  |  |  |  |  |
| JRNL 2201 | 4 |  |  |  |  |  |  |
| Khoury Elective | 4 |  |  |  |  |  |  |
|  | **17** |  | **0** |  | **0** |  | **8** |

**Year 3**

| Fall | Hours | Spring | Hours | Summer 1 | Hours | Summer 2 | Hours |
|---|---|---|---|---|---|---|---|
| JRNL 2301 | 4 | Co-op | 0 | Co-op | 0 | General Elective | 4 |
| MATH 1341 | 4 |  |  |  |  | General Elective | 4 |
| Journalism elective 1 | 4 |  |  |  |  |  |  |
| Khoury Elective | 4 |  |  |  |  |  |  |
|  | **16** |  | **0** |  | **0** |  | **8** |

**Year 4**

| Fall | Hours | Spring | Hours |
|---|---|---|---|
| CS 4220 or 2484 | 4 | CS 4530 or 4535 | 4 |
| JRNL 3550 | 4 | JRNL 4650 | 4 |
| JRNL 3610 | 4 | Computing and social issues | 4 |
| Khoury Elective | 4 | Journalism elective 2 | 4 |
|  | **16** |  | **16** |

**Total Hours: 135**