

# Computer Science and Journalism, BS

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

- 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 Requirements

| Code  | Title   | Hours |
|---|---|-------|
| <b>Computer Science Overview</b>  |   |       |
| Must be taken in alignment with your home college:  |   |       |
| CS 1200<br>or JRNL 1000   | First Year Seminar<br>Journalism at Northeastern                                | 1     |
| CS 1210<br>or EEAM 2000   | Professional Development for Khoury Co-op<br>Professional Development for Co-op | 1     |
| <b>Computer Science Fundamental Courses</b>   |   |       |
| CS 1800<br>and CS 1802  | Discrete Structures<br>and Seminar for CS 1800                                  | 5     |
| CS 2500<br>and CS 2501  | Fundamentals of Computer Science 1<br>and Lab for CS 2500                       | 5     |
| CS 2510<br>and CS 2511  | Fundamentals of Computer Science 2<br>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<br>and CS 3501  | Object-Oriented Design<br>and Lab for CS 3500                                   | 5     |
| CS 4500<br>or CS 4530   | Software Development<br>Fundamentals of Software Engineering                    | 4     |
| IS 4200<br>or IS 4300   | Information Retrieval<br>Human Computer Interaction                             | 4     |
| <b>Khoury Elective Courses</b>  |   |       |
| With adviser approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives. |   |       |
| Complete 12 semester hours of CS, CY, DS, or IS classes that are not already required. Choose courses within the following ranges:                    |   | 12    |
| CS 2500 or higher, except CS 5010   |   |       |

CY 2000 or higher, except CY 4930

DS 2500 or higher, except DS 4900

IS 2000 or higher, except IS 4900

## Journalism Major Requirements

Students transferring from outside institutions must complete a minimum of five 4-credit 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<br>and JRNL 1102 | Journalism 1: Fundamentals of Reporting and Writing<br>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.

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### 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                   |  |
| HIST 2220               | History of Technology   |  |
| INSH 2102               | Bostonography: The City through Data, Texts, Maps, and Networks |  |
| IS 1300<br>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  |  |

## 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 Plan of Study:

#### 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<br>and CS 2511                   |       | 5 CS 3000  |           | 4 Elective |       | 4        |
| CS 1800<br>and CS 1802 |       | 5 CS 3200                                  |       | 4 Elective |           | 4 Elective |       | 4        |
| CS 2500<br>and CS 2501 |       | 5 JRNL 1101<br>and JRNL 1102               |       | 5          |           |            |       |          |
| ENGW 1111              |       | 4 JRNL 2350                                |       | 4          |           |            |       |          |
| JRNL 1150              |       | 4  |       |            |           |            |       |          |
|                        |       | <b>19</b>                                  |       |            | <b>18</b> |            |       | <b>8</b> |
| <b>8</b>               |       |  |       |            |           |            |       |          |
| Year 2                 |       |  |       |            |           |            |       |          |
| Fall                   | Hours | Spring                                     | Hours | Summer 1   | Hours     | Summer 2   | Hours | Hours    |
| CS 3500<br>and CS 3501 |       | 5 CS 1210                                  |       | 1 Elective |           | 4 Co-op    |       |          |
| HIST 1130              |       | 4 JRNL 2301                                |       | 4 Elective |           | 4          |       |          |
| JRNL 2201              |       | 4 MATH 1341                                |       | 4          |           |            |       |          |
| Khoury elective        |       | 4 Journalism elective 2<br>Khoury elective |       | 4          |           |            |       |          |
|                        |       | <b>17</b>                                  |       |            | <b>17</b> |            |       | <b>8</b> |
| <b>0</b>               |       |  |       |            |           |            |       |          |
| Year 3                 |       |  |       |            |           |            |       |          |
| Fall                   | Hours | Spring                                     | Hours | Summer 1   | Hours     | Summer 2   | Hours | Hours    |
| Co-op                  |       | IS 4200 or 4300                            |       | 4 Elective |           | 4 Co-op    |       |          |
|                        |       | JRNL 3550                                  |       | 4 Elective |           | 4          |       |          |

|               |              |                             |  |              |  |  |          |          |
|---------------|--------------|-----------------------------|--|--------------|--|--|----------|----------|
|               |              | JRNL 3610                   |  | 4            |  |  |          |          |
|               |              | Khoury elective             |  | 4            |  |  |          |          |
|               |              | <b>0</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         |              | CS 4530                     |  | 4            |  |  |          |          |
|               |              | JRNL 4650                   |  | 4            |  |  |          |          |
|               |              | Computing and social issues |  | 4            |  |  |          |          |
|               |              | Journalism elective 2       |  | 4            |  |  |          |          |
|               |              | <b>0</b>                    |  | <b>16</b>    |  |  |          |          |

Total Hours: 135

**Four Years, Two Co-ops in Spring/Summer 1****Year 1**

|                     |              |                           |  |              |                       |  |              |                 |  |              |
|---------------------|--------------|---------------------------|--|--------------|-----------------------|--|--------------|-----------------|--|--------------|
| <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 1200             |              | 1 CS 2510 and CS 2511     |  | 5            | 5 CS 3500 and CS 3501 |  | 5            | Elective        |  | 4            |
| CS 1800 and CS 1802 |              | 5 CS 3200                 |  | 4            | Elective              |  | 4            | Elective        |  | 4            |
| CS 2500 and CS 2501 |              | 5 JRNL 1101 and JRNL 1102 |  | 5            |                       |  |              |                 |  |              |
| ENGW 1111           |              | 4 JRNL 2350               |  | 4            |                       |  |              |                 |  |              |
| JRNL 1150           |              | 4                         |  |              |                       |  |              |                 |  |              |
|                     |              | <b>19</b>                 |  | <b>18</b>    |                       |  | <b>9</b>     |                 |  | <b>8</b>     |

**Year 2**

|                 |              |               |  |              |                 |  |              |                 |  |              |
|-----------------|--------------|---------------|--|--------------|-----------------|--|--------------|-----------------|--|--------------|
| <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 1210         |              | 1 Co-op       |  |              | Co-op           |  |              | Elective        |  | 4            |
| CS 3000         |              | 4             |  |              |                 |  |              | Elective        |  | 4            |
| HIST 1130       |              | 4             |  |              |                 |  |              |                 |  |              |
| JRNL 2201       |              | 4             |  |              |                 |  |              |                 |  |              |
| Khoury elective |              | 4             |  |              |                 |  |              |                 |  |              |
|                 |              | <b>17</b>     |  | <b>0</b>     |                 |  | <b>0</b>     |                 |  | <b>8</b>     |

**Year 3**

|                       |              |               |  |              |                 |  |              |                 |  |              |
|-----------------------|--------------|---------------|--|--------------|-----------------|--|--------------|-----------------|--|--------------|
| <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> |
| JRNL 2301             |              | 4 Co-op       |  |              | Co-op           |  |              | Elective        |  | 4            |
| MATH 1341             |              | 4             |  |              |                 |  |              | Elective        |  | 4            |
| Journalism elective 1 |              | 4             |  |              |                 |  |              |                 |  |              |
| Khoury elective       |              | 4             |  |              |                 |  |              |                 |  |              |
|                       |              | <b>16</b>     |  | <b>0</b>     |                 |  | <b>0</b>     |                 |  | <b>8</b>     |

**Year 4**

|                 |              |                               |  |              |  |  |  |  |  |  |
|-----------------|--------------|-------------------------------|--|--------------|--|--|--|--|--|--|
| <b>Fall</b>     | <b>Hours</b> | <b>Spring</b>                 |  | <b>Hours</b> |  |  |  |  |  |  |
| IS 4200 or 4300 |              | 4 CS 4530                     |  | 4            |  |  |  |  |  |  |
| JRNL 3550       |              | 4 JRNL 4650                   |  | 4            |  |  |  |  |  |  |
| JRNL 3610       |              | 4 Computing and social issues |  | 4            |  |  |  |  |  |  |
| Khoury elective |              | 4 Journalism elective 2       |  | 4            |  |  |  |  |  |  |
|                 |              | <b>16</b>                     |  | <b>16</b>    |  |  |  |  |  |  |

Total Hours: 135