# **Computer Science**

#### Department Information

Department Location:

Quentin Burdick Building

· Department Phone:

701-231-8568

· Department Web Site:

www.ndsu.edu/cs/ (http://www.ndsu.edu/cs/)

· Credential Offered:

B.S.; B.A.

· Plan Of Study Sample:

catalog.ndsu.edu/programs-study/undergraduate/computer-science/ (http://catalog.ndsu.edu/programs-study/undergraduate/computer-science/)

# **Major Requirements**

# **Major: Computer Science**

Degree Type: B.A.

Minimum Degree Credits to Graduate: 120

#### **University Degree Requirements**

- 1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
- 2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
- 3. Satisfactory completion of the general education requirements as specified by the university.
- 4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
- 5. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
- 6. Transfer Students: Must earn a minimum of 60 credits from a baccalaureate-degree granting or professional institution.
  - a. Of these 60, at least 36 must be NDSU resident credits as defined in #7.
  - b. Within the 36 resident credits, a minimum of 15 must be in courses numbered 300 or higher and 15 credits in the major field of study.
- 7. At least 36 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.

For complete information, please refer to the Degree and Graduation Requirements (http://catalog.ndsu.edu/past-bulletin-archive/2021-22/academic-policies/undergraduate-policies/degree-and-graduation/) section of this Bulletin.

### **University General Education Requirements**

| Code                                    | Title                           | Credits |
|---|---------------------------------|---------|
| Communication (C)                       |                                 | 12      |
| ENGL 110                                | College Composition I           |         |
| ENGL 120                                | College Composition II          |         |
| COMM 110                                | Fundamentals of Public Speaking |         |
| Upper Division Writing <sup>†</sup>     |                                 |         |
| Quantitative Reasoning (R) <sup>†</sup> |                                 | 3       |
| Science and Technology (S) †            |                                 | 10      |
| Humanities and Fine Arts (A) †          |                                 | 6       |
| Social and Behavioral Sciences (B)      |                                 | 6       |
| Wellness (W) <sup>†</sup>               |                                 | 2       |
| Cultural Diversity (D) *†               |                                 |         |
| Global Perspectives (G) *†              |                                 |         |
| Total Credits                           |                                 | 39      |

- \* May be satisfied by completing courses in another General Education category.
- † General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.
- A list of university approved general education courses and administrative policies are available here (http://catalog.ndsu.edu/past-bulletin-archive/2021-22/academic-policies/undergraduate-policies/general-education/#genedcoursestext).

#### **Major Requirements**

**Total Credits** 

A Grade of 'C' or better is required for all CSCI prefix courses.

| Code   | Title  | Credits |  |
|--|--|---------|--|
| B.A. Computer Science Core Requirements                              |  |         |  |
| CSCI 114   | Computer Applications (May satisfy general education category S) | 3       |  |
| or TL 116  | Business Software Applications                                   |         |  |
| CSCI 159   | Computer Science Problem Solving                                 | 3       |  |
| CSCI 160   | Computer Science I   | 4       |  |
| CSCI 161   | Computer Science II  | 4       |  |
| CSCI 213   | Modern Software Development                                      | 3       |  |
| CSCI 222   | Discrete Mathematics   | 3       |  |
| CSCI 313   | Software Development with Frameworks                             | 3       |  |
| CSCI 366   | Database Systems   | 3       |  |
| CSCI 371   | Web Scripting Languages  | 3       |  |
| CSCI 445   | Software Projects Capstone <sup>1</sup>                          | 3       |  |
| CSCI 488   | Human-Computer Interaction                                       | 3       |  |
| CSCI 489   | Social Implications of Computers <sup>1</sup>                    | 3       |  |
| Related Courses  |  |         |  |
| COMM 260   | Introduction to Web Design                                       | 3       |  |
| COMM 261   | Introduction to Web Development                                  | 3       |  |
| MATH 146   | Applied Calculus I (May satisfy general education category R)    | 4       |  |
| or MATH 165  | Calculus I   |         |  |
| STAT 330   | Introductory Statistics  | 3       |  |
| STAT 331   | Regression Analysis  | 2       |  |
| Other Courses: Select these seven credits from the following areas:  |  | 7       |  |
| Science (cannot be courses with the CSCI prefix)                     |  |         |  |
| Engineering (cannot be ENGR 311 or ENGR 312)                         |  |         |  |
| Math (a course with a number higher than MATH 147, but not MATH 165) |  |         |  |
| Statistics (cannot be STAT 330 or STAT 331)                          |  |         |  |
| Proficiency at the second year level in a modern foreign language.   |  |         |  |

CSCI 445 Software Projects Capstone & CSCI 489 Social Implications of Computers form the department capstone. CSCI 445 is typically taken during the last spring semester and CSCI 489 is typically taken during the last fall semester prior to degree completion.