# **COMPUTER SCIENCE - MINOR**

The department offers a minor in computer science that is available to CU Boulder undergraduates. The minor offers a basic introduction to the field of computer science.

A student may not earn both a bachelor's degree in computer science (or applied computer science) and the minor in computer science from CU Boulder.

For more information, visit the department's Minor in Computer Science (http://www.colorado.edu/cs/current-students/undergraduate-students/minor/) webpage.

# Requirements

A minimum of 18 credit hours of computer science coursework is required for the minor. A minor in computer science can be earned in conjunction with any CU Boulder major degree, except for the BA and BS in computer science and applied computer science majors. For more information, visit the department's Minor in Computer Science (http://www.colorado.edu/cs/current-students/undergraduate-students/minor/) webpage.

#### **Prerequisites/Corequisites**

Calculus and Starting Computing courses do not count toward the 18 credit hours required for the computer science minor. Certain computer science courses may have additional prerequisites that are not otherwise required for or counted toward the minor.

Students should complete the following before declaring the minor.

- Calculus 1 (MATH 1300, MATH 1310, APPM 1350 or APPM 1345)
- · Calculus 2 (MATH 2300 or APPM 1360)
- CSCI 1300 Computer Science 1: Starting Computing

#### **Required Courses and Credits**

| Code                                       | Title   | Credit<br>Hours |
|--|---|-----------------|
| <b>Required Courses</b>                    |   |                 |
| CSCI 2270                                  | Computer Science 2: Data Structures <sup>1</sup>  | 4               |
| or CSCI 2275                               | Programming and Data Structures   |                 |
| CSCI 2824                                  | Discrete Structures   | 3               |
| or APPM 3170                               | Discrete Applied Mathematics  |                 |
| or ECEN 2703                               | Discrete Mathematics for Computer Engine  | ers             |
| or MATH 2001                               | Introduction to Discrete Mathematics  |                 |
| CSCI 2400                                  | Computer Systems  | 4               |
| At least one of the following is required. |   |                 |
| CSCI 3104                                  | Algorithms  |                 |
| CSCI 3155                                  | Principles of Programming Languages   |                 |
| CSCI 3753                                  | Design and Analysis of Operating<br>Systems   |                 |
| to reach minimum 1                         | upper-division Computer Science elective<br>8 credit hours, see CS Minor website for list<br>. A minimum of 4 out of 5 classes for the<br>CSCI. | 3               |

1 CSCI 1300 must be completed before declaring the minor.

### **Time to Complete**

Students should allow at least six semesters to complete the computer science minor and are advised to start the minor no later than the first semester of their sophomore year. Otherwise, students should plan to complete summer courses or delay graduation.

#### **Residency Requirements**

At least three computer science classes must be taken on the CU Boulder campus. At least two of these three must be upper-division courses (3000-level or higher).

## **Grade Requirements**

A GPA of 2.000 or better is required in the courses used to complete this minor

A grade of C- or better is required for all prerequisites and required core courses for the minor. A grade of D- or better is acceptable for computer science elective.