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 21 credit hours in 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 computer science (and applied computer science) BA and BS 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 courses do not count toward the 21 credit hours required for the computer science minor. Specific courses may have additional prerequisites that are not otherwise required or counted toward the computer science 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 Starting Computing or approved substitute, see options below (counts toward the 21 credit hours for the minor)
- CSCI 2270 Data Structures (counts toward the 21 credit hours for the minor)

Required Courses and Credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1300</td>
<td>Computer Science 1: Starting Computing 1,2</td>
<td>4</td>
</tr>
<tr>
<td>or ASEN 1320</td>
<td>Aerospace Computing and Engineering Applications</td>
<td></td>
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<tr>
<td>or ECEN 1310</td>
<td>C Programming for ECE</td>
<td></td>
</tr>
<tr>
<td>CSCI 2270</td>
<td>Computer Science 2: Data Structures 1</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 2400</td>
<td>Computer Systems 3</td>
<td>4</td>
</tr>
<tr>
<td>or ECEN 3593</td>
<td>Computer Organization</td>
<td>4</td>
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At least one of the following is required.

- CSCI 3104 Algorithms
- CSCI 3155 Principles of Programming Languages
- CSCI 3753 Design and Analysis of Operating Systems

Additional approved upper-division Computer Science electives to reach minimum 21 credit hours, see CS Minor website for list of approved classes.

Total Credit Hours: 21

1. CSCI 1300 and CSCI 2270 must be completed before declaring the minor.
2. ASEN 1320 requires grade of B- or better
3. ECEN 3593 is only 3 credit hours

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 at the upper-division level.

Grade Requirements
A grade point average (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 (except for ASEN 1320, which requires a B- or better) and required core courses for the minor. A grade of D- or better is acceptable for additional computer science electives.