ELECTRICAL ENGINEERING - MINOR

A student graduating with a bachelor’s degree from CU Boulder may also receive a minor in electrical engineering, though the minor is not available to students earning a Bachelor of Science in Electrical Engineering or Electrical & Computer Engineering.

The minor in electrical engineering provides training in electrical engineering beyond the training usually received by science, mathematics and applied mathematics majors. It can also broaden the training of students majoring in other engineering fields to provide more depth in electrical engineering. The goal is to teach students the fundamentals of electrical engineering and introduce them to at least one of its many advanced application areas. Such skills are important to students who expect to participate in real world situations that increasingly involve electrical engineering applications.

Requirements

Prerequisites

Prerequisites for the electrical engineering minor are two semesters of calculus and differential equations with linear algebra. A grade of C- or better is required in all prerequisite courses.

Students admitted to the electrical engineering minor must have a cumulative GPA of 2.700 or better. Students must still meet all prerequisites for the courses they choose.

Course Requirements

This minor requires a minimum of 18 credit hours.

A cumulative GPA of 2.00 or better is required for courses used to satisfy the requirements of this minor. Each individual course that is counted toward this minor must be passed with a grade of D- or better (note that a C- or better grade is required in all prerequisite courses).

Required Courses and Credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ECEN 2250</td>
<td>Introduction to Circuits and Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ECEN 2260</td>
<td>Circuits as Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECEN 2270</td>
<td>Electronics Design Lab</td>
<td>3</td>
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Emphasis Areas

Complete 9 credits, chosen from the following:

- ECEN 2350 Digital Logic
- ECEN 2360 Programming Digital Systems
- ECEN 2370 Embedded Software Engineering
- ECEN 3250 Microelectronics
- ECEN 3300 Linear Systems
- ECEN 3400 Electromagnetic Fields and Waves
- ECEN 3320 Semiconductor Devices
- ECEN 3170 Electromagnetic Energy Conversion 1
- ECEN 3320 Semiconductor Devices
- ECEN 4517 Power Electronics and Photovoltaic Devices Laboratory
- ECEN 4797 Introduction to Power Electronics