COMPUTER ENGINEERING - MINOR

A student graduating with a bachelor's degree from CU Boulder may also earn a minor in computer engineering. The minor is not available to students earning the Bachelor of Science in Electrical Engineering or Electrical & Computer Engineering.

The minor in computer engineering provides training in computer engineering beyond the training usually received by science and mathematics majors. It can also broaden the training of students majoring in other engineering and applied science fields to provide more depth in computer engineering. The goal is to introduce students to the fundamentals of computer engineering and introduce them to a more advanced field. Such skills are important to students who expect to participate in real world situations that increasingly involve computer engineering solutions.

Requirements

Prerequisites

Students admitted to the computer engineering minor must have a cumulative GPA of 2.700 or better. The prerequisite for these courses is computing experience provided by ECEN 1310, CSCI 1300 or ASEN 1320.

Required Courses and Credits

This minor requires a minimum of 19 credit hours. A cumulative GPA of 2.000 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).

Code	Title	Credit Hours
Required Courses		
CSCI 2270	Computer Science 2: Data Structures	4
ECEN 2350	Digital Logic	3
ECEN 2360	Programming Digital Systems	3
or CSCI 2400	Computer Systems	
ECEN 2370	Embedded Software Engineering	3
ECEN 3593	Computer Organization	3
Emphasis Area		
Choose one:		3
ECEN 3753	Real-Time Operating Systems	
ECEN 3763	FPGA Design and HDL	
ECEN 4133	Fundamentals of Computer Security	
ECEN 4313	Concurrent Programming	
ECEN 4322/5322	Data and Network Science	
ECEN 4553/ CSCI 4555	Compiler Construction	
ECEN 4693	Advanced Computer Architecture	
ECEN 4730	Practical Printed Circuit Board Design and Manufacture	
ECEN 4763	Embedded Software Algorithms	
ECEN 5139	Computer-Aided Verification	
ECEN 5593	Advanced Computer Architecture	
Total Credit Hours		**19**