

# COMPUTER ENGINEERING MINOR

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**Program Director:** Donald Yeung, Ph.D.

The minor in Computer Engineering is a program offered by the Department of Electrical and Computer Engineering. The minor will introduce students to core hardware concepts, such as computer architecture, digital logic design, and digital circuit design, as well as core software concepts, such as algorithms, discrete mathematics, and programming. Students will also learn how hardware and software interact at the interface, for example in embedded systems. With a minor in computer engineering, students will not only receive preparation for entry into the computer industry, but they will also become more effective at applying computing in their primary field of study.

## REQUIREMENTS

The Computer Engineering minor has 18 required credits of coursework. All students in the minor will be required to satisfy the two prerequisites, ENEE150 and MATH141, with grades of "B-" or higher. Students in the Electrical Engineering major will have satisfied these prerequisites as part of their program.

In order to complete the minor, students must complete all 18 required credits of the minor with a minimum grade of "C-" in each minor course

Course	Title	Credits
ENEE244	Digital Logic Design	3
ENEE245	Digital Circuits and Systems Laboratory	2
ENEE350	Computer Organization	3
ENEE351	Algorithms and Data Structures	4
Select two of the following elective courses:		6
ENEE359	Intermediate Topics in Computer Engineering (ENEE359F Hardware FPGA Design with Verilog)	
ENEE359	Intermediate Topics in Computer Engineering (ENEE359X Introduction to System Programming)	
ENEE436	Foundations of Machine Learning	
ENEE440	Microprocessors	
ENEE446	Digital Computer Design	
ENEE457	Computer Systems Security	
ENEE459	Topics in Computer Engineering (ENEE459C Digital CMOS VLSI Design Methods)	
ENEE459	Topics in Computer Engineering (ENEE459E Cryptology)	
ENEE459	Topics in Computer Engineering (ENEE459P Parallel Algorithms)	
ENEE459	Topics in Computer Engineering (ENEE459V Embedded Systems)	
<b>Total Credits</b>		<b>18</b>