

MINOR IN COMPUTER ENGINEERING

The Minor in Computer Engineering prepares students who want to complement their background in computer science or other applied science disciplines with knowledge of computer hardware design, microcontroller software programming, and hardware-software codesign to support a well-rounded knowledge of working with computing systems.

Requirements Effective Fall 2022

| Code | Title | Credits |
|--|---|-----------|
| ECE 102 | Digital Circuit Logic | 4 |
| ECE 251 or CS 270 | Introduction to Microcontrollers and IoT Computer Organization | 4 |
| Choose a minimum of 15 credits from the following: | | 15 |
| ECE 202 or ECE 204 | Circuit Theory Applications Introduction to Electrical Engineering | |
| ECE 340 | Electromagnetics for Computer Engineering | |
| ECE 445 | Digital Logic Synthesis | |
| ECE 450 | Digital System Design Laboratory | |
| ECE 451 | Digital System Design | |
| ECE 452 | Computer Organization and Architecture | |
| ECE 455 | Introduction to Robot Programming/ Simulation | |
| ECE 495A | Independent Study ¹ | |
| ECE 495B | Independent Study: Open Option Project ¹ | |
| ECE 495C | Independent Study: Vertically Integrated Projects ¹ | |
| ECE 519 | Network Centric Systems | |
| ECE 528/CS 528 | Embedded Systems and Machine Learning | |
| ECE 544 | Silicon Photonics for Computing Systems | |
| ECE 554 | Computer Architecture | |
| ECE 558 | Manycore System Design Using Machine Learning | |
| ECE 561/CS 561 | Hardware/Software Design of Embedded Systems | |
| ECE 571 | VLSI System Design | |
| ECE 575 | Experiments in VLSI System Design I | |
| Program Total Credits: | | 23 |

¹ A total 3 credits of Independent Study may apply toward total degree requirements. This includes credit awarded for ECE 495A, ECE 495B, ECE 495C combined.