ELECTRICAL/COMPUTER ENGINEERING (EECE)

EECE 225 Introduction to Circuits and Electronics
3 Credits
Analysis of electric circuits by use of Ohm’s law, network reduction, node and loop analysis, Thevenin’s and Norton’s theorems, DC and AC signals, transient response of simple circuits, transfer functions, basic diode and transistor circuits, and operational amplifiers.
Prerequisites: PHYS 132 and PHYS 132L; MATH 236 (can be taken concurrently).
Terms Typically Offered: Fall.

EECE 226 Circuits as Systems
3 Credits
Continued analysis of basic circuits, Laplace transform techniques, transfer functions, frequency response, Bode diagrams, resonant circuits, Fourier series expansions, and convolution.
Prerequisites: EECE 225 and MATH 236.
Terms Typically Offered: Spring.

EECE 227 Electronics Design Laboratory
3 Credits
Introduction to analysis, modeling, design, and testing of analog electronic circuits in a practical laboratory setting. The laboratory is centered around a robot platform and includes design, SPICE simulations, prototyping and testing of circuits necessary to drive and remotely control the robot.
Prerequisites: EECE 225 and EECE 226 (may be taken concurrently).
Terms Typically Offered: Spring.

EECE 235 Digital Logic
3 Credits
Design and applications of digital logic circuits, including both combinational and sequential logic circuits. Introduces hardware descriptive language, simulating and synthesis software, and programming of field programmable arrays (FPGAs).
Prerequisites: CSCI 130.
Terms Typically Offered: Spring.

EECE 396 Topics
1-3 Credits
Course may be taken multiple times up to maximum of 15 credit hours.

EECE 496 Topics
1-3 Credits
Course may be taken multiple times up to maximum of 15 credit hours.