

EECE Spring 2025: Courses Offered

Updated 12/02/24

Undergraduate Electives

Undergraduate Computer Engineering Electives

<u>Area</u>	<u>Course Number</u>	<u>Name of Course</u>
<u>Hardware</u>	COEN 4740	Advanced VHDL and FPGA Design
<u>Software</u>	COEN 4690	Database Programming
<u>Intelligent Systems</u>	EECE 4520	Digital Image Processing

Undergraduate Electrical Engineering Electives

<u>Area</u>	<u>Course Number</u>	<u>Name of Course</u>
<u>Electronic Devices and Systems</u>	ELEN 4440	MEMS and Nanotechnology
<u>Signals, Systems and Control</u>	ELEN 4560	Introduction to Communication Systems
<u>Electromagnetic Fields and Communications</u>	ELEN 4100	Transmission Lines and Electromagnetic Waves
<u>Power and Energy</u>	ELEN 3210	Electric Drives
	ELEN 4220	Power Electronics for Renewable Energy Systems
	ELEN 4230	Renewable and Legacy Electric Energy Systems Analysis
<u>Computer Hardware and Software</u>	COEN 4740	Advanced VHDL and FPGA Design
	EECE 4520	Digital Image Processing

Undergraduate Required Course

Undergraduate Computer Engineering Required Courses

<u>Course Number</u>	<u>Name of Course</u>
EECE 1210	Introduction to EECE 2
EECE 1610	Introduction to Programming
EECE 2030	Digital Electronics
COEN 2610	Software Methodologies
COEN 2710	Microprocessors
COEN 4800	Networks and Security
COEN 4998	Senior Design Project

Undergraduate Electrical Engineering Required Courses

<u>Course Number</u>	<u>Name of Course</u>
EECE 1210	Introduction to EECE 2
EECE 1610	Introduction to Programming
ELEN 2020	Electric Circuits 2
EECE 2030	Digital Electronics
EECE 2035	Circuits Laboratory 2
ELEN 2040	Engineering Systems
ELEN 3025	Electrical Instrumentation Laboratory
ELEN 3030	Analog Electronics
ELEN 4998	Senior Design Project

Other

<u>Course Number</u>	<u>Name of Course</u>
ELEN 3001	Electric Circuits for Non-majors

Graduate Courses

<u>Course Number</u>	<u>Name of Course</u>
EECE 5100	Transmission Lines and Electromagnetic Waves
EECE 5220	Power Electronics for Renewable Energy Systems
EECE 5230	Renewable and Legacy Electric Energy Systems Analysis
EECE 5440	MEMS and Nanotechnology
EECE 5520	Digital Image Processing

EECE 5560	Introduction to Communication Systems
EECE 5690	Database Programming
EECE 5740	Advanced VHDL and FPGA Design
EECE 5800	Networks and Security
EECE 6020	Probability and Random Processes in Engineering
EECE 6120	Electromagnetic Fields
EECE 6570	Detection and Estimation
EECE 6810	Algorithm Analysis and Applications
EECE 6931	Renewable Energy: Policy, Technology, and Sustain.
EECE 6952	Department Colloquium