

## EECE Fall 2022: Tentative Courses Offered

April 7, 2022

### Undergraduate Electives

#### Undergraduate Computer Engineering Electives

<u>Area</u>	<u>Course Number</u>	<u>Name of Course</u>
<u>Hardware</u>	EECE 4410	Intro to Device Fabrication (breath or depth)
	EECE 4510	Digital Signal Processing (depth only)
<u>Software</u>	COEN 4830	Intro to Computer Graphics (breath or depth)
<u>Intelligent Systems</u>	COEN 4850	Intro to Intelligent Systems (breath or depth)
	COEN 4890	Artificial intelligence (depth only)

#### Undergraduate Electrical Engineering Electives

<u>Area</u>	<u>Course Number</u>	<u>Name of Course</u>
<u>Electronic Devices &amp; Systems</u>	EECE 4410	Intro to Device Fabrication
	ELEN 4130	Antenna Theory and Design
	ELEN 4430	Physical Principles of Solid State Devices
	ELEN 4460	Sensor Devices: Theory, Design and Applications
<u>Signals, Systems, and Control</u>	ELEN 4390	Developments in Control: State Space Design of Control Systems
	EECE 4510	Digital Signal Processing
	ELEN 4550	Developments in Signal Processing: Probability and Statistics for Engineers
<u>Electromagnetic Fields and Communications</u>	ELEN 4130	Antenna Theory and Design
	ELEN 4390	Development in Controls: State Space Design of Controls
	EECE 4510	Digital Signal Processing

## Con't UG Electrical Engineering Electives

Area	Course Number	Name of Course
<b>Power and Energy</b>	<b>ELEN 4210</b>	<b>Design and Analysis of Electric Motor-Drive Systems</b>
	<b>ELEN 4290</b>	<b>Sustainable Energy Conversion</b>
<b>Computer Hardware and Software</b>		
	<b>COEN 4720</b>	<b>Embedded Systems Design</b>
	<b>COEN 4830</b>	<b>Intro to Computer Graphics</b>
	<b>COEN 4850</b>	<b>Intro to Intelligent Systems</b>
	<b>EECE 4410</b>	<b>Intro to Device Fabrication</b>
	<b>COEN 4890</b>	<b>Artificial intelligence (depth only)</b>

## Undergraduate Required Courses

### Undergraduate Computer Engineering Required Courses

Course Number	Name of Course
<b>EECE 1200</b>	<b>Intro to Computer and Electrical Engineering 1</b>
<b>EECE 2010</b>	<b>Electric Circuits 1</b>
<b>EECE 2015</b>	<b>Circuits Lab 1</b>
<b>EECE 3010</b>	<b>Electronic Devices and Applications</b>
<b>EECE 3015</b>	<b>Intro to Microcontrollers Lab (Digital Lab)</b>
<b>COEN 4720</b>	<b>Embedded Systems Design</b>
<b>COEN 4920</b>	<b>Principles of Design (Senior Design)</b>

### Undergraduate Electrical Engineering Required Courses

Course Number	Name of Course
<b>EECE 1200</b>	<b>Intro to Computer and Electrical Engineering 1</b>
<b>EECE 2010</b>	<b>Electric Circuits 1</b>
<b>EECE 2015</b>	<b>Circuits Lab 1</b>
<b>EECE 3010</b>	<b>Electronic Devices and Applications</b>
<b>EECE 3015</b>	<b>Intro to Microcontrollers Lab (Digital Lab)</b>
<b>ELEN 3020</b>	<b>Linear Systems Analysis</b>

<b>ELEN 3035</b>	<b>Electronics Projects Lab (Analog Lab)</b>
<b>ELEN 3110</b>	<b>Electromagnetic Fields 1</b>
<b>ELEN 4920</b>	<b>Principles of Design (Senior Design)</b>

## Graduate Courses

<b>Course Number</b>	<b>Name of Course</b>
<b>EECE 5130</b>	<b>Antenna Theory and Design</b>
<b>EECE 5210</b>	<b>Design and Analysis of Electric Motor-Drive Systems</b>
<b>EECE 5290</b>	<b>Developments in Energy and Power</b>
<b>EECE 5390</b>	<b>Development in Controls: State Space Design of Controls</b>
<b>EECE 5410</b>	<b>Intro to Device Fabrication</b>
<b>EECE 5430</b>	<b>Physical Principles of Solid State Devices</b>
<b>EECE 5460</b>	<b>Sensor Devices: Theory, Design, and Applications</b>
<b>EECE 5510</b>	<b>Digital Signal Processing</b>
<b>EECE 5550</b>	<b>Development in Signal Processing: Probability and Statistics for Engineers</b>
<b>EECE 5830</b>	<b>Intro to Computer Graphics</b>
<b>EECE 5850</b>	<b>Intro to Intelligent Systems</b>
<b>EECE 5890</b>	<b>Artificial intelligence</b>
<b>EECE 6010</b>	<b>Advanced Engineering Mathematics</b>
<b>EECE 6220</b>	<b>Advanced Concepts in the Design and Modeling of Electric Machines and Drives</b>
<b>EECE 6310</b>	<b>Modern Control Theory</b>
<b>EECE 6810</b>	<b>Algorithm Analysis and Applications</b>
<b>EECE 6952</b>	<b>Department Colloquium</b>