

EECE Fall 2022: Tentative Courses Offered

August 11, 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 & 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 |
| | ELEN 4240 | Protection & Monitoring of Electric Energy Systems |
| <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 |
|---------------------------------------|------------------|---|
| <u>Power and Energy</u> | <u>ELEN 4290</u> | <u>Sustainable Energy Conversion</u> |
| <u>Computer Hardware and Software</u> | | |
| | <u>COEN 4720</u> | <u>Embedded Systems Design</u> |
| | <u>COEN 4830</u> | <u>Intro to Computer Graphics</u> |
| | <u>COEN 4850</u> | <u>Intro to Intelligent Systems</u> |
| | <u>EECE 4410</u> | <u>Intro to Device Fabrication</u> |
| | <u>COEN 4890</u> | <u>Artificial intelligence (depth only)</u> |

Undergraduate Required Courses

Undergraduate Computer Engineering Required Courses

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

Undergraduate Electrical Engineering Required Courses

| Course Number | Name of Course |
|------------------|---|
| <u>EECE 1200</u> | <u>Intro to Computer and Electrical Engineering 1</u> |
| <u>EECE 2010</u> | <u>Electric Circuits 1</u> |
| <u>EECE 2015</u> | <u>Circuits Lab 1</u> |
| <u>EECE 3010</u> | <u>Electronic Devices and Applications</u> |
| <u>EECE 3015</u> | <u>Intro to Microcontrollers Lab (Digital Lab)</u> |
| <u>ELEN 3020</u> | <u>Linear Systems Analysis</u> |
| <u>ELEN 3035</u> | <u>Electronics Projects Lab (Analog Lab)</u> |

| | |
|------------------|---|
| ELEN 3110 | Electromagnetic Fields 1 |
| ELEN 4920 | Principles of Design (Senior Design) |

Graduate Courses

| Course Number | Name of Course |
|----------------------|---|
| EECE 5130 | Antenna Theory and Design |
| EECE 5210 | Design and Analysis of Electric Motor-Drive Systems |
| EECE 5240 | Protection & Monitoring of Electric Energy Systems |
| EECE 5290 | Developments in Energy and Power |
| EECE 5390 | Development in Controls: State Space Design of Controls |
| EECE 5410 | Intro to Device Fabrication |
| EECE 5430 | Physical Principles of Solid State Devices |
| EECE 5460 | Sensor Devices: Theory, Design, and Applications |
| EECE 5510 | Digital Signal Processing |
| EECE 5550 | Development in Signal Processing: Probability and Statistics for Engineers |
| EECE 5830 | Intro to Computer Graphics |
| EECE 5850 | Intro to Intelligent Systems |
| EECE 5890 | Artificial intelligence |
| EECE 6010 | Advanced Engineering Mathematics |
| EECE 6310 | Modern Control Theory |
| EECE 6810 | Algorithm Analysis and Applications |
| EECE 6952 | Department Colloquium |