Concentrations:

- Student must complete 9 credits and 3 courses minimum to have a concentration
- Student must complete 2 concentrations
- Electrical Engineering student must complete minimum of 38 concentration credits which cannot be from courses found in ECE Core and Electrical Engineering Program Core
- Computer Engineering student must complete minimum of 34 concentration credits which cannot be from courses found in ECE Core and Computer Engineering Program Core

**NOTE:** Any student found to be taking any EEL or EEE course without its prerequisite or co-requisite will be dropped from the course without a refund.

### Power / Energy
- EEL 4213: Power Systems I
- EEL 4213L: Energy Conversion Laboratory
- EEL 4214: Power II
- EEL 4215: Power III
- EEL 4241: Power Electronics
- EEL 5285C: Sustainable and Renewable Energy Source and Their Utilization

### Control Systems
- EEL 3657: Control Systems I
- EEL 4611: Control Systems II
- EEL 4611L: Systems Lab
- EEL 4658: Industrial Control Systems
- EGN 3311: Statics
- EGN 3321: Dynamics

### Integrated Nano-technology
- EEE 3303: Electronics I
- EEE 3303L: Electronics I Lab
- EEE 3396: Introduction to Solid State Devices
- EEE 4304: Electronics II
- EEE 4304L: Electronics II Lab
- EEE 4314: Integrated Circuits and Systems
- EEE 4314L: Integrated Circuits Laboratory
- EEE 4421C: Intro to Nanofabrication

### Communications
- EEL 3514: Communication Systems
- EEL 3514L: Communication Lab
- EEL 4421: Introduction to RF Circuit Design
- EEL 4461C: Antennas
- EEL 4510: Intro. to DSP
- EEL 4515: Adv. Communication Systems
- EEL 4595C: Intro. to Wireless Digital Comm.

### Embedded System
- EEL 3160: Computer Applications in Electrical Engineering
- EEL 4730: Programming Embedded Systems
- EEE 4734: Embedded Operating Systems
- EEL 4740: Embedded Computing
- EEL 4831: Embedded GUI Programming

### Network Engineering
- TCN 4081: Telecommunication Network Security
- TCN 4211: Telecommunication Networks
- TCN 4212: Telecommunication Network Analysis and Design
- TCN 4431: Principles of Network Management and Control Standards
- EEL 4789: Ethical Hacking & Countermeasures
- EEE 4717: Intro. to Security of IoT

### Computer Architecture & Microprocessor Design
- EEE 4343: Intro. to Digital Electronics
- EEL 4709C: Computer Design
- EEL 4746: Microcomputers I
- EEL 4746L: Microcomputers I Laboratory
- EEL 4747: Microcomputers II
- EEL 4747L: Microcomputers II Laboratory

### Data System Software
- MAD 2104: Discrete Mathematics
- COP 2210: Programming I
- COP 3337: Programming II
- COP 3530: Data Structures
- COP 4338: Computer Programming III
- COP 4604: Unix Programming
- COP 4610: Operating Systems Principles

### Others
- EEL 4015: Electrical Design in Buildings I