2019-2020 Computer Engineering Technical Electives

**CE Focus Technical Electives: You must take at least three of these**

- **ECE 417** Introduction to Robotics (ECE177 & MAT228)
- **ECE 414** Feedback Control Systems (ECE314)
- **ECE 351** Fields and Waves (ECE210 & MAT228)
- **ECE 435** Network Engineering (ECE331 or ECE471)
- **ECE 471** Embedded Systems (ECE271)
- **ECE 484** Communications Engineering (ECE314 & ECE316)
- **ECE 477** Hardware Applications in C (ECE277)
- **ECE 497** Selected Topics with CE focus (varies)
- **ECE 478** Industrial Computer Control (ECE271)
- **ECE 494** Electric Power Systems (C- in ECE210)
- **ECE 423** Electric Power Systems (ECE210 & C- in ECE210)
- **ECE 444** Analog IC Design (ECE314 & ECE343)
- **ECE 427** Electric Power Systems (C- in ECE210)
- **ECE 445** Digital IC Design (ECE342)
- **ECE 462** Semiconductor Devices (Chy131,PHY122,MAT258)
- **ECE 464** Microelectronics Engineering (Chy131,PHY122,MAT258)
- **ECE 465** Introduction to Sensors (junior standing)
- **ECE 498** Selected Topics with CE focus (varies)
- **COS 3xx** Computer Science Elective (varies)
- **COS 4xx** Computer Science Elective (varies)
- **ECE 453** Microwave Engineering (ECE351)
- **ECE 478** Industrial Computer Control (ECE271)
- **ECE 477** Hardware Applications in C (ECE277)
- **ECE 498** Selected Topics with CE focus (varies)
- **COS 3xx** Computer Science Elective (varies)
- **COS 4xx** Computer Science Elective (varies)
- **ECE 498** Selected Topics (varies)

If you wish to specialize in an area, some possibilities are:

**Embedded Control**
ECE478, ECE477, ECE471, ECE414

**High Performance Computing**
ECE331, ECE477

**Robotics**
ECE417, ECE477, ECE471, ECE487

2019-2020 Course Catalog (5/17/2019)