In addition to the required courses in the BSEE curriculum and flowchart, if you are interested in careers in any of the following **Electrical Engineering Specialty Areas**, we would recommend that you choose from the following **Engineering Support Electives** and **Technical Electives**.

**IC Design and Fabrication:**
- **MATE 210 Materials Engineering (3)**
- **MATE 215 Materials Lab I (1)**
- **MATE 340 Electronics Materials Systems (4)**
- **PHYS 412  Solid State Physics (3) [F]**
- **PHYS 452  Solid State Physics Lab (1) [SP]**
- **EE/PHYS 422  Polymer Electronics Lab (1) [F,W]**
- **EE 431/CPE 441  Computer-Aided Design of VLSI Devices (3+1) [F]**
- **BMED 434/EE 423/MATE 430  Micro/Nano Fabrication (3) [W]**
- **BMED 435  Microfabrication Lab (2) [W]**
- **EE 524  Solid State Electronics (3) [S]**
- **EE 531/CPE 541  Advanced VLSI Design (3+1) [F]**
- **EE 532  VLSI Testing (1) [S]**
- **EE 544  Solid-State Electronics & VLSI Lab (1) [S]**
- **IME/MATE 458/CPE 488  Microelectronics and Electronics Packaging (3+1)**

**Sustainability in Electronics:**
- **ME 211  Engineering Statics (3)**
- **ME 212  Engineering Dynamics (3)**
- **ME 302  Thermodynamics (3)**
- **PHYS 310  Physics of Energy (3) [SP]**
- **EE 410  Power Electronics I (3+1) [F]**
- **EE 411  Power Electronics II (3+1) [W]**
- **EE 413  Advanced Electronic Design (4) [SP]**

**Wireless and RF Electronics:**
- **MATH 206  Linear Algebra I (4)**
- **MATH 304  Vector Analysis (4) [W,S]**
- **PHYS 408  Electromag. Fields & Waves I (4) [F]**
- **EE 440  Wireless Communications (3) [W]**
- **EE 480  Wireless Communications Lab (1) [W]**
- **EE 405  High Frequency Amplifier Design (3) [F]**
- **EE 445  High Frequency Amp Design Lab (1) [F]**
- **EE 412  Advanced Analog Circuits (3) [W]**
- **EE 452  Advanced Analog Circuits Lab (1) [W]**
- **EE 413  Advanced Electronic Design (4) [S]**
- **EE 425  Analog Filter Design (3) [S]**
- **EE 455  Analog Filter Design Lab (1) [S]**
- **EE 524  Solid State Electronics (3) [S]**
- **EE 525  Stochastic Processes (4) [F]**
- **EE 529  Microwave Device Electronics (3) [W]**

**Biomedical Instrumentation:**
- **BMED 310 Measurement/Analysis (4) [FW]**
- **BMED 440  Bioelectronics and Instrumentation (3+1) [FW]**
- **EE 412  Advanced Analog Circuits (3) [W]**
- **EE 452  Advanced Analog Circuits (1) [W]**
- **EE 413  Advanced Electronic Design (3+1) [S]**
- **EE 419  Digital Signal Processing (3) [W]**
- **EE 459  Digital Signal Process. Lab (1) [W]**
- **CPE/EE 442  Real-Time Embedded Systems (3+1) [F]**
- **CPE/EE 447  Stringed Musical Instrument..Design (3+1) [S]**