Professional Preparation Curriculum Planning

Computers

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**

Digital IC Design:

CSC/CPE 102 Fundamentals of CS II (3+1)
or CSC/CPE 202 Data Structures (3+1)
CSC/CPE 103 Fundamentals of CS III (3+1)
or CSC/CPE 203 Object Oriented Program.(3+1)
CPE 315 Computer Architecture (4)
EE 431/CPE 441 Computer-Aided Design of
        VLSI Devices (4) [F]
CPE/EE 439 Intro. to Real-Time Operating
        Systems (3+1) [F]
EE 523 Digital Systems Design (3+1) [F]
EE 521 Computer Systems with Lab (3+1) [S]

Computer IC Architect:

CSC/CPE 102 Fundamentals of CS II (3+1)
or CSC/CPE 202 Data Structures (3+1)
CSC/CPE 103 Fundamentals of CS III (3+1)
or CSC/CPE 203 Object Oriented Program (3+1)
CPE 315 Computer Architecture (3+1)
EE 431/CPE 441 Computer-Aided Design of
        VLSI Devices (4) [F]
CPE/EE 439 Intro. to Real-Time Operating
        Systems (3+1) [F]
EE 523 Digital Systems Design (3+1) [F]
EE 521 Computer Systems with Lab (3+1) [S]
CPE 515 Computer Architecture* (3+1) [W]
        * Not currently an approved Technical Elective

FPGA Designer:

CSC/CPE 102 Fundamentals of CS II (3+1)
or CSC/CPE 202 Data Structures (3+1)
CSC/CPE 103 Fundamentals of CS III (3+1)
or CSC/CPE 203 Object Oriented Program (3+1)
CPE 315 Computer Architecture (3+1)
CPE/EE 439 Intro. to Real-Time Operating
        Systems (3+1) [F]
EE 523 Digital Systems Design (3+1) [F]

Roboticist:

CPE 102 Fundamentals of CS II (4)
ME 305 Intro to Mechatronics (3+1)
CPE/EE 428 Computer Vision (3+1) [W]
ME 405 Mechatronics (3+1) [W,S]
CPE/EE 439 Intro. to Real-Time Operating
        Systems (3+1) [F]
EE 432 Digital Control Systems (3) [F]
  EE 472 Digital Control Systems Lab (1) [F]
CPE 416 Autonomous Mobile Robotics (3+1)