

ECE Breadth/Depth Electives

(1) Electromagnetics & Solid State Devices

ECE 4317: Experimental Techniques in EM. Prereq: ECE 2100 & 3317.
ECE 5113: Microwave Engineering Lab. Prereq: ECE 2100 & cfori ECE 5317.
ECE 5114: Antenna Engineering Lab. Prereq: ECE 2100 & cfori ECE 5318.
ECE 5317: Microwave Engineering. Prereq: ECE 3317.
ECE 5318: Antenna Engineering. Prereq: ECE 3317.
ECE 5314: Intro. Nano Desgn & Fabrication. Prereq: ECE 3317 & cfori ECE 4339
ECE 5346: VLSI Design. Prereq: ECE 3456 or 3457
ECE 5366/5116: Integrated Circuit Engineering. Prereq: ECE 4339 & cfori ECE 5116.

(2) Power & Controls

ECE 4363/4113: Electromechanical Energy Conversion.
Prereq: ECE 3364 & cfori ECE 4113(prereq ECE 2100).
ECE 4375/4115: Automatic Control Systems. Prereq:
ECE 3337 & cfori: ECE 4115(prereq: ECE 2100 & ECE 3337)
ECE 5115: Control Systems Lab II Prereq: ECE 2100 & 4375 & cfori ECE 5335.
ECE 5118: Control Systems Lab III. Prereq: ECE 2100 & 4375 & cfori ECE 5385.
ECE 5335: State Space Control Systems. Prereq: ECE 4375.
ECE 5377/5127: Power Transmission & Distribution. Prereq: ECE 3364 & cfori ECE 5127.
ECE 5380: Power Electronics & Electric Drives. Prereq: ECE 3355.
ECE 5385: Control System Component Design. Prereq: ECE 4375.

(3) Signals & Communications

ECE 3366: Introduction to Digital Signal Processing. Prereq: ECE 3337.
ECE 4117: Telecommunications Laboratory. Prereq: CFORI ECE 4371.
ECE 4371: Introduction to Telecommunication. Prereq: ECE 3337, INDE 2333.
ECE 5451: Principles of Internetworking. Prereq: ECE 3331,3441 & CFORI ECE 4371.
ECE 5354: Digital Video in Telecommunications. Prereq: ECE 3337 & CFORI ECE 4436.

(4) Electronics

ECE 3456: Analog Electronics. Prereq: ECE 3337 & ECE 3355.
ECE 3457: Digital Electronics. Prereq: ECE 3337 & ECE 3355.
ECE 4458: Bioinstrumentation: Prereq: ECE 3355
ECE 5356: CMOS Analog IC: Prereq: ECE 3456
ECE 5364/5112: Electronic Circuit Design. Prereq: ECE 3456 & cfori ECE 5112.

In addition to the above, the following electives may be available:
ECE 4437: Embedded Microcomputer Systems. Prereq: ECE 4436.
ECE 5340: Introduction to Well-Logging Techniques. Prereq: ECE 3317.
ECE 5367: Introduction to Computer Architecture. Prereq: ECE 4436
ECE 5392: Introduction to Biomedical Engineering. Prereq: ECE 3366, 3441 & 3355.
ECE 5436: Advanced Microprocessor Systems. Prereq: ECE 4436
ECE 5440: Advanced Digital Design. Prereq: ECE 3441, 3355 & cfori ECE 4436

Students following the EE option of the BSEE Degree Plan must complete at least 21 hours consisting of at least six ECE electives (3- or 4- hour ECE courses, with associated labs). At least one course must be taken in each of two of the four non-computer concentration areas. At least two additional 3- or 4- hour courses must be taken at the 5000 level while the remaining two courses may be any 3- or 4- hour ECE elective at the 3000 level or above except ECE 3336. All prerequisites/corequisites must be satisfied.

Consult the Department WebPage (www.egr.uh.edu/ece) for updated listing of planned course offerings by semester.