

Electrical and Computer Engineering Department – Rice University
Bachelor of Science in Electrical Engineering

The BSEE is the usual degree taken by students planning a career of engineering practice. It is accredited by ABET, and can thus reduce the time required to become a registered professional engineer. Accreditation and professional licensure are important for some careers, and many states require licensure for those providing engineering services directly to the public, for example, as a consultant.

See the General Announcements for the general university degree requirements. A BSEE program must have a minimum of 134 semester hours, and include the following courses. Students who place out of required courses without transcript credit must substitute another course *in the same area*. A course can satisfy only one program requirement, except for design. For the latest information consult the ECE Web site www.ece.rice.edu.

University Distribution Requirements: Groups I and II

Mathematics and Science Courses:

MATH 101, 102, 212, CAAM 335 or MATH 355, and ELEC 331
PHYS 101, 102, ELEC 261 and CHEM 121

Additional *approved* math and science courses to bring the total to 32 hours.

ECE Core: ELEC 220, 241, 242, 301, 305, 326, and 391

Computation: CAAM 210 or COMP 210

Design: ELEC 493, 494, and one from ELEC 422, 432, 464 or 491. ELEC 491 project proposals must be approved by the department *before the start of the course*.

Specialization: A minimum of 7 Specialization Area courses, including 4 or more in one area, and courses from at least two areas. Each course must be at least 3 semester hours. The department may add or delete courses from the areas, and graduate courses and equivalent courses from other departments may be used to satisfy area requirements with permission. Consult with department advisors and the ECE Web site for the latest information.

Computer Engineering: COMP 212, ELEC 322, 421, 422, 424, 425, 426, 427
428, 429, and COMP 430

Systems: Control , Communications & Signal Processing

ELEC 302, 381, 430, 431, 432, 434, 436, 439, 446, 481, 482, 485, 486,
534, and 535

Electronic Circuits & Devices: ELEC 342, 435, 442, 443, 444, 445, 462, and 561

Quantum Electronics: PHYS 202, ELEC 306, 361, 462, 463, 464, 465, 563,
564, 567, 568, and 569

Unrestricted Electives:

Additional courses to provide the BSEE minimum requirement of 134 semester hours.