Bachelor of Arts in Electrical Engineering 2014-2015

The BA degree provides a basic foundation in Electrical and Computer Engineering that is highly flexible, permitting a student to tailor the program to his or her interests be they broad or highly focused. Because of its flexibility and large number of free electives, the BA can be combined easily with courses from other departments to create an interdisciplinary program. This may be particularly appropriate for students planning further study in law, business, or medicine. The Program leading to the BA Degree is not accredited by the Engineering Accreditation Commission of ABET.

See the section in the General Announcements for the general university degree requirements. A BA program must have a total of at least 121 semester hours and include the following courses. A course can satisfy only 1 program requirement. Students who place out of required courses without transcript credit must substitute other approved courses in the same area. Current degree requirements and planning sheets may be found [www.ece.rice.edu](http://www.ece.rice.edu)

University Distribution Requirements: Groups I and II

Mathematics and Science Courses:
- ELEC 261, ELEC 303. **Note:** ELEC 303 is required for BA; must have Instructor's approval.
- MATH 101, 102, 212, MATH 355 or CAAM 335, PHYS 101/111, PHYS 102/112

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

Computation: COMP 140

Design Laboratory: Students choose one of the approved design laboratory courses typically based on their Specialization Area:
- a) ELEC 327 Implementation of Digital Systems for Computer Engineering Area.
- b) ELEC 332 Electronic Systems Principles and Practice for Systems Area.
- c) ELEC 327 or ELEC 332 for Neuroengineering for Neuroengineering Area.
- d) ELEC 364 Photonic Measurements: Principles and Practice for Photonics and Nanoengineering Area.

**Note:** that the required Design Laboratory does not count as specialization.

Specialization: For the BA Program, a minimum of 4 Specialization Area courses, including 2 or more in one area, and courses from at least two areas are required. 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. **Note:** Graduate courses, in the 500 level series, can often count as specialization courses with Advisor's approval. Consult with department advisors and the ECE web site: www.rice.edu for the latest area courses.

- ELEC 301 is a required course for the BSEE degree; however ELEC 301 can count as a specialization course for the BA degree.
- If the Design Laboratory requirement (ELEC 327, 332, or 364) is satisfied with the lab in their chosen Major Specialization Area, then the student takes 2 of 4 courses in their chosen Major Specialization Area. However, if the Design Laboratory requirement is satisfied with the lab in their Minor Area, then it is recommended that the student takes 3 (three) of 4 courses in their chosen Major Specialization Area. It is important to consult a departmental advisor in this situation or if interested in taking a second Design Laboratory course

Computer Engineering: ELEC 323†, 342, 345, 419, 420†, 421†, 424, 425, 427, 429†, 446 and COMP 321†, and 430†

**Note:** The courses marked above with a plus (+), ELEC 323/COMP 322, ELEC 420/COMP 482, ELEC 421/COMP 421, ELEC 429/COMP 429, COMP 321 and COMP 430 are courses listed or crosslisted with Computer Science. The sequence of COMP 140, COMP 182, COMP 215 are recommended in addition the Computer Engineering Area as these are pre-requisite for the crosslisted Computer Science courses.

Neuroengineering: ELEC 342, 345, 381, 431, 480, 481, 482, 485, 486, 488† and 489†.


Unrestricted Electives:
Additional courses to provide the BA minimum requirement of 121 semester hours.