

# Electrical Engineering — MS, PhD

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## Degree Programs

- Electrical Engineering — MS ([http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/electricalandcomputerengineeringmeemsphd\\_major/electicalcomputerenr\\_ms/](http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/electricalandcomputerengineeringmeemsphd_major/electicalcomputerenr_ms/))
- Electrical Engineering — PhD ([http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/electricalandcomputerengineeringmeemsphd\\_major/electicalcomputerenr\\_phd/](http://bulletin.auburn.edu/thegraduateschool/graduatedegreesoffered/electricalandcomputerengineeringmeemsphd_major/electicalcomputerenr_phd/))

Electrical and Computer Engineering (ECE) offers graduate programs of instruction and research leading to master and doctoral degrees. Instruction is offered and research facilities are available to support graduate study in control systems & robotics, digital signal processing and communications, wireless engineering, electromagnetics modeling and analysis, microelectronics & microelectromechanical systems (MEMS), magnetic resonance imaging (MRI), power systems, digital systems, and computer engineering. Additionally, individualized programs that cross the traditional boundaries of engineering, mathematics and the sciences can be accommodated.

For admission at the master's level, the applicant must hold a bachelor's degree or its equivalent from an institution of recognized standing. Master's degree programs are available to graduates of engineering curricula and, in cases of exceptional academic credentials, to graduates of mathematics and science curricula.

An applicant for admission to the PhD program should hold a master's degree, or have taken a minimum of one academic year of graduate study, from an institution of recognized standing in an area of study related to the proposed doctoral work. An applicant who holds a bachelor's degree in electrical or computer engineering and has exceptional academic credentials may apply for direct admission to the PhD program.

All applicants must submit Graduate Record Examination scores for the General Test, three recommendation letters, a statement of purpose, and a resume. International applicants must also submit scores for either the TOEFL or IELTS exam.

Applications for admission are reviewed by the departmental graduate faculty. Decisions are based upon the applicant's potential for success in advanced-level study as indicated by letters of reference, GRE scores and previous academic achievement.

The MS (thesis option) program requires a minimum of 30 semester hours of work, including 4 to 6 semester hours of research and thesis. MS (thesis option) students must pass an oral examination on the thesis. The MS (non-thesis option) program requires 33 semester hours of coursework, including at least 18 semester hours of ECE courses. Both masters programs must include courses in at least three of the major research areas in ECE and no more than 3 semester hours of independent study.

Students admitted to the doctoral program will take a written qualifying examination soon after entering, covering fundamental undergraduate material in ECE. Additional examinations are given throughout the program. The program generally consists of a minimum of 60 semester hours of course work beyond the bachelor's level, including at least 10 hours of research and dissertation. A minor of at least 9 semester hours in a closely related field outside of the major area of study, either within or outside of ECE, is required.