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# **Electrical and Computer Engineering**

Program Description	Туре	Degree
Computer Engineering, B.S. (https:// coursecat.isu.edu/undergraduate/ scienceengineering/electrical-and-computer- engineering/bs-computer-engineering/)	Degree	B.S.
Electrical Engineering, B.S. (https:// coursecat.isu.edu/undergraduate/ scienceengineering/electrical-and-computer- engineering/bs-electrical-engineering/)	Degree	B.S.
Electrical Engineering Technology, B.S. (https://coursecat.isu.edu/undergraduate/ scienceengineering/electrical-and-computer- engineering/bs-electrical-engineering- technology/)	Degree	B.S.

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#### **General Information**

Idaho State University ECE graduates are successfully employed in many and varied pursuits -- private, commercial, industrial, government, etc. -- throughout the region, the nation, and the world. Many have also chosen to continue advanced studies in a variety of specialized engineering disciplines.

Every student entering ECE is assigned a faculty advisor to guarantee selection of an appropriate plan of study and to ensure continuity throughout the program. Each student must complete appropriate university general education courses together with specialized ECE program requirements. A student pursuing a double major should regularly consult a faculty advisor from each of the two major programs.

Students entering electrical or computer engineering should have adequate preparation in math (algebra and trigonometry or higher) to enter the calculus sequence. Those not entering at the calculus level will not be eligible to register for any ECE course beyond EE 1101 until they have met this mathematics requirement. This may consequently require more than four years to succeed in graduation from the program.

Other academic opportunities available include a combined BSEE/MBA degree program, as well as a two-year post-ASEET program leading technicians and technologists *with at least five years of on-the-job experience* to a BS degree in electrical engineering technology (BSEET). Students who are interested in these programs should consult the ECE Chair for further details.

#### **General Education Requirements**

Students working toward the Bachelor of Science degree must complete 8 of the University's 9 General Education Objectives (a minimum of 36 credits). See the General Education Requirements in the Academic Information section of the catalog for more information.

## **Fundamentals of Engineering Exam**

Electrical engineering students are encouraged to take the Fundamentals of Engineering (FE) exam during their senior year, while the breadth of the engineering material covered on the examination is still fresh in their minds. This exam is the first step in professional licensure for engineers.

#### **Academic Rules and Policies**

A current Idaho State University student who intends to transfer a course from another university to Idaho State University must obtain prior approval for the transfer - either via transfer credit review (petition process) or through existing program articulation. Articulated courses are listed on the Office of the Registrar web page under Transfer Credit Process. Transfer credits must be posted to the student's ISU transcript prior to registration for any course that has those course credits as a prerequisite or co-requisite. To maintain "satisfactory academic progress" undergraduate students must maintain a cumulative Idaho State University GPA of 2.0 or higher every semester. Failure to do so will result in academic probation and/or academic dismissal. ECE students must also maintain at least a 2.00 GPA in the major to meet departmental graduation requirements.

# Accreditation

The Bachelor of Science program in Electrical Engineering (BSEE) is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/).

#### **Educational Objectives**

- Depth and Breadth: Graduates will demonstrate broad and in-depth knowledge in the practice of, or advanced study of, electrical engineering.
- **Career Development:** Graduates will maintain the knowledge and skills through lifelong learning to keep abreast of advancements in their fields.
- **Professionalism:** Graduates will demonstrate an ability to manage and uphold professional responsibilities and ethics.

## Declaring an Electrical or Computer Engineering Major

To declare an Electrical or Computer Engineering major, a student must meet with an ECE faculty advisor to develop a plan of study leading to degree completion. Declaration of major should be done as early as possible upon consultation with the faculty advisor.

# Faculty (https://coursecat.isu.edu/ undergraduate/scienceengineering/electricaland-computer-engineering/faculty/)

# ECE Courses (http://coursecat.isu.edu/ undergraduate/allcourses/ece/)