Electrical Engineering, B.S.E.

Electrical engineers develop technologies and systems for a wide variety of applications ranging from telecommunications to medical imaging. They play a central role in the design and implementation of any technology that is powered by electricity as well as the generation and distribution of electric power. Topics covered in the electrical engineering curriculum include: design of electronic circuits, communication systems, control systems, and semiconductor devices. Students may opt to specialize in any of these areas as well as others that include electrical power generation and distribution, medical image processing, computer systems, or design of micro- and nano-scale optical and electronic devices.

Educational Objectives

Graduates of the electrical engineering program will:

• exhibit leadership and vision in contributing to the technical and policy decisions of industry, government, and research enterprises;
• demonstrate problem-solving abilities that permit them to contribute in a variety of technical, business, and academic careers;
• thrive in diverse, global, and multidisciplinary environments;
• possess the ability to communicate effectively and participate collaboratively in interactions with engineers and other professionals; and
• understand the importance of participating in lifelong learning activities that enhance their professional and personal development.