

ELECTRICAL ENGINEERING

Mission Statement

The mission of the Department of Electrical and Computer Engineering is to offer baccalaureate degree programs of excellence in electrical engineering and computer engineering that serve the needs of the West Florida region, the state, and the nation. The goal of the baccalaureate degree programs is to prepare students to embark upon professional careers in electrical engineering, computer engineering, or to pursue graduate study. The Bachelor of Science degrees in Electrical Engineering and Computer Engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET).

Student Learning Outcomes

UWF Electrical Engineering graduates should be able to do the following:

Content

- Recognize, interpret, and apply concepts of mathematics, science, and engineering
- Recognize and describe contemporary issues

Critical Thinking

- Identify and apply the techniques, skills, and modern engineering tools necessary for engineering practice
- Identify, formulate, and solve engineering problems
- Design and conduct experiments, as well as evaluate and interpret data

Communication

- Identify and apply the skills necessary to communicate effectively
- Recognize the need for, and able to engage in, life-long learning

Integrity/Values

- Recognize professional and ethical responsibility
- Recognize the impact of engineering solutions in a global, economic, environmental, and societal context

Project Management

- Identify and apply the skills necessary to function on multidisciplinary teams
- Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

Evaluation of Student learning Outcomes

The electrical and computer engineering department uses the following assessment tools to determine the outcome achievements for electrical engineering and for on-going continuous program improvements: (1) a major capstone design course which is based on the knowledge and skills acquired in earlier course work within the curriculum, (2) a 3 year cycle of collecting student work from targeted courses and evaluating student attainment of the program outcomes using these samples (3) Exit Interview Surveys by graduating seniors, (3) Exit Interview Surveys by graduating seniors, (4) Alumni Surveys, and (5) Employer surveys.

Job Prospects for Electrical Engineering Graduates

Electrical Engineers find career opportunities in a wide area of settings such as aerospace contractors, manufacturers of consumer electronics, telecommunications, energy distribution, and public-sector positions with federal, state, and local governments. The typical job functions include design, development, testing, or supervision of the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use. According to the US Federal Bureau of Labor Statistics, the demand for electrical engineering is expected to continue growing. Electrical Engineering graduates typically rank among the highest paid professionals.

Find Out More about Electrical Engineering:

www.uwf.edu/ece