

COMPUTER 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 Computer 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 computer engineering and for ongoing 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, (4) Alumni Surveys, and (5) Employer surveys.

Job Prospects for Computer Engineering Graduates

Computer engineers find career opportunities in a wide variety of companies or organizations involving the design, development, building, testing, and operation of computer systems. Computer engineers deal with both hardware and software (programming) problems. In designing a computer system, computer engineers must decide how much of the computer logic to put into hardware and how much to put into software. The work of the computer engineers and computer scientists is closely related. Computer engineers tend to be more involved with the computer hardware, whereas computer scientists tend to be more involved with the computer software and less emphasis on hardware. The typical job functions include research, design, development, and testing of computer or computer-related equipment for commercial, industrial, military, or scientific use. Computer Engineers may supervise the manufacturing and installation of computer or computer-related equipment and components. According to the US Federal Bureau of Labor Statistics, the demand for computer engineering is expected to continue growing. Computer Engineering graduates typically rank among the highest paid professionals.

***Find Out More about Computer Engineering at
UWF:***

www.uwf.edu/ece