

## MASTERS OF SCIENCE IN ENGINEERING

### Mission Statement

*The mission of the Electrical and Computer Engineering Department is to offer undergraduate and graduate programs of excellence in engineering that serve the needs of the West Florida region, the state, and the nation. The goal of these programs is to prepare students for a successful professional career in their respective chosen discipline of study. All programs shall be revised continuously to improve quality and respond to current workforce needs.*

### Student Learning Outcomes

Graduates with a Master of Engineering degree should be able to do the following:

#### Content

- Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

#### Critical Thinking

- Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

#### Communication

- Communicate effectively verbally and in writing with a range of audiences.

#### Integrity/Values

- Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

#### Project Management

- Apply the engineering design process to produce solutions that meet specified needs with consideration for public health and safety, and global, cultural, social, environmental, economic, and other factors as appropriate to the discipline.

### Assessment of Student Learning Outcomes

Program SLOs will be assessed using selected student work in the required course of Principles of Engineering Analysis (EGN 6XXX) and in the Thesis/Project.

## **Job Prospects**

With a Master of Engineering degree, you can pursue jobs in a variety of fields where specialization and/or extra knowledge are needed. With this degree, you can advance up the ranks and/or become the lead engineer in your unit/organization. Some of the opportunities a Master of Engineering degree holder enjoys include:

- Senior/Lead electrical engineer
- Senior/Lead mechanical engineer
- Senior/Lead computer engineer
- Senior/Lead systems engineer
- Engineering project manager
- Processing engineering manager
- Construction project manager
- Design engineer
- Product engineer