Optical Engineering Program Educational Objectives

The Norfolk State University Electrical and Electronics Engineering program graduates will:

- Devise technical solutions based on sound principles in science and engineering
- Be effective communicators of technical information within professional settings or to broader audiences
- Be ethically responsible members of the engineering community and cognizant of societal impacts of engineering solutions
- Continue their professional development in business settings or through advanced degree attainment

Optical Engineering Student Outcomes

The Optical Engineering faculty has identified 12 core learning outcomes that will fully support the ability of graduates to successfully pursue modern engineering opportunities beyond the undergraduate level. The faculty has further developed its curriculum to help students achieve the intended program outcomes. Students who successfully complete the Electronics Engineering Program curriculum will be able to demonstrate the following:

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturing, and sustainability
- An ability to function on multi-disciplinary teams
- An ability to identify, formulate, and solve engineering problems
- An understanding of professional and ethical responsibility
- An ability to communicate effectively, in technical and public arenas
- The broad education necessary to understand the impact of engineering solutions in a global economic, environmental and societal context
- A recognition of the need for, and an ability to engage in life-long learning
- A knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
- The knowledge and skills necessary to support effective leadership, or to pursue entrepreneurial opportunities

Optical Engineering Program Statistics

Fall 2014 Undergraduate Enrollment: 27

AY 2012-2013 Undergraduate Degrees Conferred: 4