

## **ELECTRCIAL ENGINEERING**

### **Enrollment and Graduation Data**

Fall 2018 Enrollment – 608

2017-18 Graduates – 108 BS degrees conferred

### **Program Educational Objectives**

Broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve a few years after graduation. The electrical engineering faculty, in conjunction with its constituents, has established the program educational objectives for each of its students. The PEO's of the BS degree program in electrical engineering at RIT are to have graduates who will achieve the following:

**Electrical engineering graduates are expected, within a few years of graduation, to have demonstrated:**

- The application of mathematics, basic sciences, and core electrical engineering knowledge to the development of systems-based solutions (PEO-1)
- An ability to enhance to enhance their skills through formal education and training, independent inquiry and professional development (PEO-2)
- An ability to work independently as well as collaboratively with others, and to have demonstrated leadership, accountability, initiative and ethical and social responsibility (PEO-3)
- The ability to successfully pursue graduate degrees at the master's and doctoral levels for those graduates that have relevant qualifications (PEO-4)

### **Student Outcomes**

Students outcomes identify what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire in their matriculation through the program. The student outcomes of the BS degree in electrical engineering are such that the graduates of the program will have the following skills and attributes:

- *Engineering Foundations* An ability to apply knowledge of mathematics, science, and engineering.
- *Experimentation* An ability to design and conduct experiments, as well as to analyze and interpret data.
- *Design* 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, manufacturability, and sustainability.
- *Multidisciplinary Teamwork* An ability to function on multidisciplinary teams
- *Problem Solving* An ability to identify, formulate, and solve engineering problems.
- *Professional Responsibility* An understanding of professional and ethical responsibility.
- *Communication* An ability to communicate effectively.

- *Broad Education* The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- *Life-Long Learning* A recognition of the need for, and an ability to engage in life-long learning.
- *Contemporary Issues* A knowledge of contemporary issues.
- *Modern Tools* An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- *Experiential Education* Acquire experiential education (through co-op) to complement and enhance course work in Electrical Engineering.