4.3. EE Program Specification

4.3.1. EE Educational Objectives

Electrical Engineering is a very broad field, having within its scope many areas of specialization. An electrical engineering graduate is qualified to apply a broad base of engineering and science skills to create a wide variety of system solutions and solve an array of technical issues with an emphasis in areas of electrical phenomena. They will have developed specialized emphasis in a particular area of this broad field and have very specific knowledge and technical skills that will allow them to provide support to focused areas of larger solutions. As such, we expect that during the first four years following graduation, our graduates will:

1. Function as responsible and ethical members of the profession and society with an understanding of the social and economic ramifications of their work.

2. Successfully apply their knowledge and skills in electrical engineering in finding creative solutions to engineering problems involving electrical phenomena, devices, or systems.

In their professional endeavors, our graduates will:

3. Succeed in entering commercial electrical engineering practice as demonstrated by such indicators as:
   
   a. obtaining their first promotion,
   b. contributing to the competitive edge of their employer,
   c. being a productive member of an engineering team,
   d. demonstrating individual technical capability,
   e. generating high quality technical documentation,
   f. pursuing continuing education.

Or, they will:

4. Succeed in full time graduate studies at highly respected graduate schools as demonstrated by either:
   
   a. earning a Masters degree, or
   b. having made satisfactory progress toward a Doctorate degree.

4.3.2. EE Program Outcomes

As prescribed in ABET EC2000, graduates of this program shall have demonstrated they have the following general engineering traits:

a) the ability to apply knowledge of mathematics, science and engineering
b) the ability to design and conduct experiments, as well as to analyze and interpret data
c) the ability to design a system, component, or process to meet desired needs.