

4.2.1. CpE Educational Objectives

A computer Engineer views a computer-based system as a continuum of technologies spanning both sides of the traditional *analog/digital* systems boundary and the traditional *hardware/software* boundary. The ability to integrate all of these technologies into a single system, and to make hardware/software trade-offs, makes the Computer Engineer uniquely qualified to conceive, design, and build complete computer-based systems to serve a wide variety of applications. 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 computer engineering to specify, design, model, implement, program, and test integrated hardware/software systems as creative solutions to engineering problems.

In their professional endeavors, our graduates will:

3. Succeed in entering commercial computer 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.