

# Objectives

The College of Engineering strives to prepare its graduates to understand their roles in and make constructive contributions to a technological society, and to provide ethical and moral leadership in their profession and communities. These objectives are accomplished by various methods, but primarily by integrating into the curriculum the values and morality of Villanova University's Augustinian heritage. In addition to being professionally competent, graduates are expected to have an understanding of their professional and ethical responsibilities, the impact on engineering solutions in a global and societal context, knowledge of contemporary issues, and an appreciation of humanistic concepts in literature, the arts and philosophy.

The College pursues these objectives by:

- Valuing all members of the Villanova community and beyond.
- Supporting innovation and excellence in teaching.
- Supporting faculty development through research and professional activities.
- Emphasizing design and the design process so that students are exposed to real-world situations.
- Graduating students who:
  - Apply scientific and mathematical concepts and principles to identify, formulate and solve problems in a real-world context.
  - Plan and conduct experimental investigations, and analyze and interpret their results.
  - Function effectively on project teams.
  - Contribute to teams.
  - Communicate ideas and information.
  - Understand the role of the engineering profession and technology, including appreciating concepts drawn from the humanities and social sciences.
  - Embody high professional and ethical standards.
  - Have the motivation and capability to acquire, evaluate, and assimilate knowledge and continue the learning experience.
  - Appreciate the value of service and other cultures.