



EDUCATIONAL OBJECTIVES

A primary goal of the mechanical engineering and aerospace engineering degree programs is to provide an educational experience and training that will prepare graduates to excel within the broad scope of the mechanical and aerospace engineering professions. Our Program Educational Objectives are to enable our graduates to attain the following professional and career accomplishments during the first few years following graduation:

- Be employed in a professional mechanical, aerospace or related engineering organization, or be admitted to graduate programs in engineering or other professional areas,
- Become an active participant in professional society activities,
- Demonstrate the initiative, motivation and ability to grow professionally in their chosen endeavor.

STUDENT OUTCOMES

Mechanical engineering and aerospace engineering student outcomes established to accomplish the educational objectives are as follows.

- an ability to apply knowledge of mathematics, science and engineering
- an ability to design and construct 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, manufacturability and sustainability
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- an ability to understand through a broad education, the impact of engineering solutions in a global, economic, environmental and societal context
- 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 the ability to engage in, lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern engineering tools necessary for engineering practice