Department of Aerospace Engineering and Engineering Mechanics

Program Educational Objectives

Within a few years of earning the baccalaureate degree in Aerospace Engineering at the University of Cincinnati our graduates are expected to achieve one or more of the following objectives:

1. Develop successful careers as aerospace engineers; demonstrate professional engineering competence via promotions and/or positions of increasing responsibility.

2. Successfully complete or pursue graduate education in engineering and related fields, participate in professional development and/or industrial training courses and/or obtain engineering certification.

3. Participate in research and development, and other creative and innovative efforts in science, engineering and technology, and/or pursue entrepreneurial endeavors.

4. If not in an aerospace engineering career, successfully transition into an education, business, legal, medical or government career.

5. Demonstrate a commitment to the community and profession through involvement with community and/or professional organizations.
**Student Outcomes**

Student Outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program.

a) An ability to apply knowledge of mathematics, science, and engineering.

b) An ability to design and conduct experiments, as well as to analyze and interpret data.

c) 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.

d) An ability to function on multidisciplinary teams.

e) An ability to identify, formulate, and solve engineering problems.

f) An understanding of professional and ethical responsibility.

g) An ability to communicate effectively.

h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

i) A recognition of the need for, and an ability to engage in life-long learning.

j) A knowledge of contemporary issues.

k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.