

Program Learning Outcomes Aerospace Science and Engineering

Program Educational Objectives

- Prepare its graduates to practice mechanical and/or aerospace engineering in a broad range of industries;
- Enable interested graduates to pursue graduate education;
- Prepare its graduates to participate in research and development, and other creative and innovative efforts in science, engineering, and technology;
- Allow interested graduates to pursue entrepreneurial endeavors.

Student Outcomes

1. an ability to apply knowledge of mathematics, science, and engineering;
2. an ability to design and conduct experiments as well as analyze and interpret data;
3. 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;
4. an ability to function on multi-disciplinary teams;
5. an ability to identify, formulate, and solve engineering problems;
6. an understanding of professional and ethical responsibility;
7. an ability to communicate effectively;
8. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
9. a recognition of the need for and an ability to engage in life-long learning;
10. knowledge of contemporary issues;
11. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.