

Mechanical Engineering

Program Educational Objectives:

Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies.

The Dunwoody mechanical engineering curriculum is designed to effectively prepare students for engineering careers, such that they achieve the following objectives within a few years of graduation:

1. Graduates demonstrate technical competency across mechanical engineering, with an ability to practically execute projects and add value for their employers.
2. Graduates are advancing in both work responsibility and technical expertise.
3. Early career alumni understand the importance of collaboration and quickly become dependable collaborators who work well with others from technical and non-technical backgrounds.
4. Early career alumni recognize the ethical implications and challenges of their work and influence others to consider the ethical consequences of their work.

Student Outcomes (ABET 1-7):

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.

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.