



Mechanical Engineering

Program Mission Statement

The mission of the School of Engineering is to provide diverse learning opportunities in the technical and professional aspects of engineering that prepare all participants to thrive in an evolving world.

The mechanical engineering program educational objectives are to produce graduates with sound engineering fundamentals, strong team and leadership skills, strong problem solving skills, an ability to learn and advance, and effective communication skills.

Faculty closely collaborate on teaching and learning and also work with an external advisory board to contribute to the actualization of the mission. Also, faculty are engaged in research which further contributes to the meeting the mission.

Student Learning Outcomes

Graduates will be able to:

Content/Discipline-Specific Knowledge/Skills

- have the content knowledge, including an ability to use the techniques, skills and modern engineering tools, necessary for engineering practice.

Communication Skills

- have an ability to communicate effectively. This student learning outcome is defined as student outcome (g) by ABET.

Critical Thinking Skills

- have an ability to design a system, component, or process to meet desired needs. This student learning outcome is defined as student outcome (c) by ABET.

Assessment Approaches

The mechanical engineering program utilizes a number of direct and indirect assessment measures, in agreement with our accreditation agency ABET, to assess proficiency of course outcomes and student outcomes. Direct assessment tools include course exams, projects, and other course assignments critical thinking, communication, and discipline-specific knowledge. Indirect assessment tools include graduating senior surveys, alumni surveys, and employer surveys and are used to assess critical thinking, communication, and discipline-specific knowledge. While each course is individually assessed - primarily through the direct assessment tools, the program is also assessed as a whole through regular discussions in faculty meetings on where specific skills should be taught and how the learning opportunities can be enhanced to ensure that the student learning outcomes are met. The indirect assessment tools contribute to the overall assessment of the program.