

The B.S. Mechanical Engineering Program Educational Objectives are:

After completing the Mechanical Engineering undergraduate program, students will be able to:

- Compete successfully on the world stage at the professional level
- Understand the significant local, regional, national, and global issues facing humankind
- Continue to develop as engineers through lifelong learning
- Serve as resources of technical knowledge for the state as well as the nation, especially with respect to extreme latitude issues

The Student Outcomes of the B.S. Mechanical Engineering Program are:

- an ability to apply knowledge of mathematics, science, and engineering
- an ability to design and conduct 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 multi-disciplinary teams
- an ability to identify, formulate, and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- 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 an 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.
- knowledge of northern issues