MECHANICAL ENGINEERING,  
B.S.E.

Learning Outcomes

LO 1 - Complex Problems
an ability to identify, formulate, and solve complex engineering problems  
by applying principles of engineering, science, and mathematics

LO 2 - Design
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

LO 3 - Communication
an ability to communicate effectively with a range of audiences

LO 4 - Judgement
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

LO 5 - Teams
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

LO 6 - Experiments
an ability to develop and conduct appropriate experimentation, analyze  
and interpret data, and use engineering judgment to draw conclusions

LO 7 - Knowledge
an ability to acquire and apply new knowledge as needed, using  
appropriate learning strategies.

Academic Standards

Program GPA
Program GPA requirement policies are described in the College of  
Engineering and Computing section of this bulletin. For the purpose of  
these policies, the following courses are used to determine the Program  
GPA for the Mechanical Engineering B.S.E. program: All Lower Division  
Engineering courses, all Mechanical Engineering Major courses, and all  
courses used to satisfy a Mechanical Engineering Elective.