AEROSPACE ENGINEERING, B.S.E.

Program Educational Objectives

Within a few years of graduation, our graduates are expected to achieve the following milestones:

• Advance professionally in the aerospace industry, automotive industry, technical consultancy or in any other chosen career field
• Earn advanced degrees in aerospace engineering, (or a related technical discipline such as automotive engineering), business or law
• Attain leadership positions in today’s rapidly changing, increasingly technological, global society.
• Be agents of innovation and function effectively as responsible members of professional teams.

Learning Outcomes

The program is intended to train students in the field of aerospace engineering such that they are well prepared for a career as a multidisciplinary engineer in the aerospace industry or any other industry that requires the abilities specified by ABET for engineers at the BS level:

• Students shall have an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
• Students shall have 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.
• Students shall have an ability to communicate effectively with a range of audiences.
• Students shall have 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.
• Students shall have 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.
• Students shall have an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
• Students shall have 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 Aerospace Engineering B.S.E. program: all Lower Division Engineering courses, all Aerospace Engineering Major courses, and all Track Electives courses.