

**UNDERGRADUATE OVERVIEW**

Mechanical Engineering is the branch of engineering that is most directly and broadly concerned with mechanical systems and with their use to control and transform energy for the benefit of humankind. Mechanical engineering embraces the science and art of the generation, transmission and utilization of thermal and mechanical energy and the design, production, and application of devices and systems.

The Department of Ocean and Mechanical Engineering offers a course of study designed to prepare the individual for an active career in mechanical engineering or to continue education through postgraduate studies.

Mechanical engineering is an extensive field, and it is necessary for every student to attain considerable knowledge in the mechanical, thermal, and material sciences. The program allows for special areas of interest through a sufficient number of technical electives in areas such as mechanical design, energy conservation, controls, environmental control, materials science, computer-aided design, and others.

To make a significant contribution to society, both as mechanical engineers and as individuals, students must pursue studies in the humanities and social sciences to better understand their relationship and responsibility to society.

Finally, the student must develop the ability to apply knowledge to the analysis and solution of significant engineering problems through courses in engineering design.

Because mechanical engineering is such a broad field, the program of study forms an excellent background for fruitful professional careers in many fields.