General Mechanical Engineering

About the Major:

Those who study mechanical engineering learn about motion and energy, and they study fluid, solid and thermal mechanics. They spend time in labs, where they develop problem-solving skills and evaluate and design products. These products can range from prosthetics to machine parts and car engines.

Marketable Skills Developed in this Major:

- Developing strong interpersonal and communication skills
- Investigate equipment failures or difficulties to diagnose faulty operation and recommend remedial actions
- Design or redesign mechanical and thermal devices or subsystems, using analysis and computer-aided design
- Develop and test prototypes of devices
- Conduct research that tests or analyzes the feasibility, design, operation, or performance of equipment, components, or systems
- Provide feedback to design engineers on customer problems or needs
- Evaluate mechanical designs or prototypes for energy performance or environmental impact

Relevant Fields:

Automotive

- Electronics
- Chemical products
- Petroleum
- Textiles
- Industrial equipment
- Heating and air conditioning systems

Sample Occupational Titles

with a Bachelor's Degree:

- Manufacturing Engineer
- Opto-Mechanical Engineer
- Hydraulic Mechanical Engineer
- Turbomachinery Engineer

Professional Associations:

- <u>U.S. Department of the</u>

 <u>Navy</u>
- <u>Coffman Engineers</u>
- Johnson & Johnson
- Ford Motor Company
- General Electric (GE)

Career Opportunities and Job Outlook:

Employment of mechanical engineers is projected to grow 7 percent from 2020 to 2030, about as fast as the average for all occupations. About 20,200 openings for mechanical engineers are projected each year, on average, over the decade.

Salary Estimates:

The median annual wage for mechanical engineers was \$90,160 in May 2020.

(This section is intended for informational purposes, not prediction of actual salary.)