

# Mechanical Engineering

Students in the mechanical engineering major will learn to apply fundamental knowledge of mathematics, science and engineering to the creative development of solutions to complex technical problems. The core curriculum provides students with an understanding of the core ideas that have shaped human thinking in engineering and the humanities, arts and sciences. This understanding gives students the context to understand the cultural intentions of God's plan for human activity and to understand the environmental, economic, ethical, sustainability, social and safety impact of their engineering designs on creation and mankind. Graduates will be well prepared to pursue employment in industry and to pursue graduate studies in engineering and related fields.

### What Type of Work are Related to this Degree?

- Mechanical engineering
- Machine/systems design
- Packaging/industrial design
- Industrial engineering
- Quality control or analysis
- Instrumentation and control systems
- Weapons and defense
- Manufacturing and production
- Energy conversion
- Transportation and environmental impact
- Materials and structures
- Robotics
- Construction

### Who Employs People with this Degree?

- Contracting and consulting firms
- Manufacturing firms
- Engineering firms
- Construction industries
- Industrial design/consulting firms
- Public utility companies
- Government agencies
- Logistics companies
- Insurance companies (safety)
- Medical device companies
- Communications or telecommunications
- Aerospace or defense industry
- Transportation industries

#### **Professional Associations**

American Engineering Association  
American Society of Mechanical Engineers  
Minnesota Society of Professional Engineers  
National Society of Professional Engineers  
Society of Women Engineers

#### **Top Companies Hiring in Minnesota**

Actalent  
Boston Scientific  
Medtronic  
GPAC  
Honeywell International

**More information at [ONETonline.org](https://www.onetonline.org) and [mnprivatecolleges.org/member-resources/labor-market-tool](https://mnprivatecolleges.org/member-resources/labor-market-tool)**

### General Strategies for Success:

- A bachelor's degree provides a wide range of career opportunities in industry, business and government.
- Develop excellent verbal and written communications skills, including presentation and technical report writing. Learn to work well on a team to maximize collaborations with other engineers and those outside of the profession.
- Develop computer expertise within your chosen field, such as computer-aided design (CAD) and computer-aided manufacturing (CAM). Continued education and keeping abreast of new developments are very important.
- Join relevant professional associations, attend meetings, find internships, and participate in design competitions and stay up-to-date on research/publications.

This information represents possible occupations and strategies for careers with this major. As with any job or career, there may be additional qualifications or experience needed. For more information and options, make an appointment with Career & Leadership Development or check out our online resources on our website or on myUNW, Career & Leadership Development tab.

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