What can I do with a major in...  
Mechanical engineering

ACTIVITIES MECHANICAL ENGINEERING MAJORS DO:
Mechanical engineers design and develop power-producing machines, such as internal combustion engines, steam and gas turbines, and jet and rocket engines. They use computers not only to form preliminary designs for systems or devices, but also to perform calculations that will predict the behavior of the design and to collect and analyze performance data. Mechanical engineers also design and develop power-using machines, such as refrigeration and air-conditioning equipment, robots, machine tools, material handling systems, and industrial production equipment. Mechanical engineers design tools needed by other engineers to do their work. They combine practical and technical skills with analytical and intellectual pursuits, while valuing work that requires research and a high level of creativity. In addition, mechanical engineers may work in production operations in manufacturing or agriculture, maintenance, or technical sales. Many mechanical engineers are administrators or managers. Mechanical engineering is one of the broadest engineering disciplines. Mechanics, energy and heat, mathematics, engineering sciences, design, and manufacturing form the foundation of mechanical engineering.

Mechanical engineers can specialize in applied mechanics, design engineering, heat transfer, power plant engineering, nanofabrication, pressure vessels and piping, plant maintenance, biomedical engineering, construction, and underwater technology.

INDUSTRIES MECHANICAL ENGINEERING MAJORS WORK IN (SAMPLE LISTING):
Manufacturing
Petroleum
Packaging
Pumps and fluid systems

Measurement systems
Heating and cooling
Government agencies
Telecommunications

Automotive
Alternative energy
Technical sales
Biomedical

Research and development
Consulting
Environmental
Computer technologies

EMPLOYERS WHO HIRE MECHANICAL ENGINEERING MAJORS (SAMPLE LISTING):
3M
Medtronic, Inc.
IBM
Parker Hannifen
Graco Inc.
Accenture
Honeywell

Applied Materials
Oak River Technology
Cargill
Donaldson Co.
Rockwell Automation
Cummins Inc.
Ingersoll Rand

Eaton Corp.
Brady Corp.
Datacard Group
Ecolab
Boston Scientific
ExxonMobil
Beckman Coulter

Polar Semiconductor Inc.
General Dynamics
General Electric
Micron Technology
Flint Hills Resources
DuPont

TYPES OF POSITIONS FOR MECHANICAL ENGINEERING MAJORS (SAMPLE LISTING):
- **Design engineer**: Develops mechanical automation designs from customer specifications, conducts design reviews with customers, uses analytical tools to assist in the design process, and interfaces with suppliers.
- **Energy engineer**: Works with architects, engineers, contractors, and stakeholders to provide energy efficiency and sustainable design services to the commercial building sector by identifying opportunities for energy savings and reduction.
- **Drilling engineer**: Plans and designs oil and gas wells in support of drilling organizations’ mission to conduct all worldwide oil and gas well drilling with an emphasis on safety, cost, and efficiency improvement.
- **Quality engineer**: Supports development and ensures compliance with the company’s quality management system (QMS) in accordance with industry standards and provides technical support to product engineering, marketing, manufacturing, etc.

**Some of these positions may require an advanced degree.**
USEFUL WEBSITES FOR MECHANICAL ENGINEERING MAJORS:

Department of Mechanical Engineering me.umn.edu
Mechanical Engineering Magazine memagazine.org
Mechanical Engineering Career Toolkit careertoolkits.com/mechanical-engineering
MechanicalEngineering.com mechanicalengineer.com

USEFUL WEBSITES FOR ENGINEERING MAJORS:

Engineer.net engineer.net
Engineer Jobs engineerjobs.com
Engineering Central engcen.com
Graduating Engineer graduatingengineer.com
ThinkJobs.com thinkjobs.com
Engineering.com engineering.com
Engineer Info engineer.info

PROFESSIONAL ORGANIZATIONS:

American Society of Mechanical Engineers asme.org
National Association of Power Engineers powerengineers.com
Society of Automotive Engineers sae.org
Society of Manufacturing Engineers sme.org
International Association of Mechanical Engineers iasme.org
Institute of Transportation Engineers ite.org
American Council of Engineering Companies-MN chapter acecmn.org
National Society of Professional Engineers nspe.org/index
Minnesota Society of Professional Engineers mnspe.org
Society of Women Engineers swe.org

*Additional job/internship search websites and resources can be found at cse.umn.edu/career

Information on this page was compiled from the Occupational Outlook Handbook, the Encyclopedia of Careers and Vocational Guidance, University of Minnesota departmental websites, and student-reported data.