MECHANICAL ENGINEERING
What can I do with this major?

AREAS

MECHANICAL
- Machine design
- Systems design
- Manufacturing and production
- Energy conversion
- Energy resources
- Transportation and environmental impact
- Materials and structures

EMPLOYERS

Industries including:
- Automotive, aerospace, electronics, chemical products, petroleum, textiles, industrial equipment, heating and air conditioning systems
- Utility companies
- National laboratories
- Federal government:
  - Department of Energy
  - Department of Defense
  - Federal Aviation Administration
  - National Aeronautics and Space Administration

STRATEGIES

Very broad discipline incorporating the research, design, development, manufacturing and testing of mechanical devices.

- Learn computer-aided design (CAD) and computer-aided manufacturing (CAM).
- Obtain related experience through engineering internships, co-ops or part-time jobs.
- Develop strong interpersonal and communication skills; consider a class in public speaking to enhance presentation skills. Plan to collaborate with other types of engineers and with those in industry.
- Join student chapter of American Society of Mechanical Engineers to take advantage of mentorship programs, learn more about specialties in the field and participate in design competitions.

GENERAL INFORMATION

- Utilize Sloan Career Cornerstone Center’s website to learn more about opportunities in engineering.
- A bachelor’s degree provides a wide range of career opportunities in industry, business and government.
- A bachelor’s degree is good background for pursuing technical graduate degrees as well as professional degrees in Engineering, Business Administration, Medicine or Law.
- Graduate degrees offer more opportunities for career advancement, college or university teaching positions.
- Related work experience obtained through co-op, internships, part-time or summer jobs is extremely beneficial.
- 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 field.
- Engineers need to think in scientific and mathematical terms and exhibit the abilities to study data, sort out important facts, solve problems and think logically.
- Other helpful traits include intellectual curiosity, creativity, technical aptitude, perseverance and a basic understanding of the economic and environmental context in which engineering is practiced.
- Because of rapid changes in most engineering fields, both continued education and keeping abreast of new developments are very important.
- Join relevant professional associations, attend meetings, participate in design competitions and stay up-to-date on research/publications.
- All states and the District of Columbia require registration of engineers whose work may affect the life, health or safety of the public.
- Professional or technical societies confer certification in some areas.
- Research Fundamentals of Engineering (FE) exam requirements, as this exam is typically the first step in becoming a Professional Engineer (PE).
- Professional Engineer (PE) licensing guidelines vary by state. Check with the National Council of Examiners for Engineering and Surveying (NCEES) for links to state boards.
- Become familiar with the federal job application and employment procedures.