MECHANICAL ENGINEERING

What can I do with this major?

AREAS	EMPLOYERS	STRATEGIES
ANY ENGINEERING DISCIPLINE Research and Development Design Production Operations Management Teaching Consulting Sales and Marketing Law Manufacturing Healthcare	Engineering companies Consulting companies Industry Local, state and federal government Colleges and universities	Obtain relevant experience through co-ops or internships for industry-related career. Develop strong verbal, written, teamwork and problem-solving skills. Pursue Master of Science (MS), Master of Engineering (ME), or Master of Business Administration (MBA) degrees for increased opportunities in technical management. Obtain Ph.D. for teaching and research careers. Learn federal, state and local government job application procedures. Pursue Professional Engineering licensure.
MECHANICAL Machine Design Systems Design Manufacturing and Production Energy Conversion Energy Resources Transportation and Environmental Impact Materials and Structures	Nuclear Utility Companies Industries including: Medical equipment, power equipment, defense, aerospace, environmental, waste management, food preservation National laboratories Hospitals Federal government: Department of Energy National Aeronautics and Space Administration (NASA) Nuclear Regulatory Commission Environmental Protection Agency Department of Homeland Security Department of Defense	***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.
- 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. Creativity is useful.
- Other helpful traits include intellectual curiosity, 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.

Prepared by the Career Planning staff of Career Services at The University of Tennessee, Knoxville. (1998, Revised 1999, 2004, 2011)
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