UNM | Office of Career Services
University Advisement & Enrichment Center, Room 220
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www.career.unm.edu

WHAT CAN I DO WITH A MAJOR IN … MECHANICAL ENGINEERING

OCCUPATIONAL OVERVIEW

The Bureau of Labor Statistics (BLS) (2012) explains that mechanical engineering is one of the broadest disciplines within engineering. BLS explains that mechanical engineers, "research, design, develop, build, and test mechanical and thermal devices, including tools, engines, and machines."

EMPLOYMENT REQUIRMENTS

The Bureau of Labor Statistics (2012) explains that a bachelor's degree in mechanical engineering is the minimum formal education required to work as a mechanical engineer. BLS highlights that a Professional Engineering (PE) Licensure is required to publically sell services. BLS also notes that a graduate degree (M.S., M.E., and/or Ph.D.) is required to hold positions in management, research, or academia. Consult O*Net for more information on the specific KSAs (Knowledge, Skill, Ability) that are required for this career.

THE UNIVERSITY OF NEW MEXICO

The UNM Mechanical Engineering department offers a Bachelor of Science in Mechanical Engineering (B.S.M.E.), Master of Science in Mechanical Engineering (M.S.), and a Doctor of Philosophy in Engineering. Faculty specialty areas for graduate work include Mechanical Sciences and Engineering (including Dynamic Systems, Controls, and Robotics), Engineering Mechanics and Materials (including Solid Mechanics and Materials Science), and Thermal Sciences and Engineering (including Energy/Thermodynamics, Fluid Mechanics, and Heat Transfer). Consult the department website for more information on degree programs and research areas. The College of Engineering also offers various other degree tracks such as the Master of Engineering and the 2 + 3 B.S. & Master of Business Administration program. More information on these programs can be found in the University Catalog by selecting "Colleges" on the right and selecting "School of Engineering".

INDUSTRIES & TARGET EMPLOYERS

A variety of employers specifically recruit UNM students and alumni. Consult UNM's Lobo Career Connection for a complete list of employers and current job postings. Speak with a Career Development Facilitator at the UNM Office of Career Services for help with identifying employers or additional resources for your occupation of choice.

Business/Industry
Robotics, modeling, consulting, research, energy, semiconductors, aerospace, bioengineering, manufacturing, transportation and automotive, mechatronics, structural analysis, thermodynamics, drafting, design

Government
Federal, national and local government agencies, research, national laboratories

Education
University/college instruction or administration, researcher

SUGGESTED STRATEGIES

- Gain related mechanical engineering professional experience through involvement in internships, student employment, Co-ops, research, and/or volunteer opportunities.
- Shadow professionals in the field to gain a better understanding of the occupation and to build relationships with professional mentors.
- Build your network and get involved on campus through student organizations and campus events. The School of Engineering website outlines student organizations that are affiliated with the School of Engineering as well as the Electrical and Computer Engineering department. You can find more organizations and events at the Student Activities Center website.
- Attend career-related campus events such as career fairs, company information sessions, or career workshops.

- Students who are interested in graduate school should maintain a high undergraduate GPA, develop relationships with faculty, and participate in undergraduate research. UNM's Research Opportunity Database at http://research-match.unm.edu/. Some research opportunities include
  - Ronald E. McNair Scholars Program
  - Research Opportunity Program (ROP)
  - Minority Access to Research Careers Program (MARC)
  - Initiative for Maximizing Student Development (IMSD)
  - Undergraduate Pipeline Network
  - UNM Engineering Research Centers
  - Research at the University of New Mexico
- Speak with mentors and faculty about career opportunities.
- Job leads can be found on your department's website, list-serv, newsletters, and social media sites.
- Familiarize yourself with the federal job application process.

STATE & NATIONAL WAGES

Adapted from CareerOneStop (2013)

MECHANICAL ENGINEER

Location	2012				
	10%	25%	Median	75%	90%
United States	$52,000	$64,500	$80,600	$100,600	$121,500
New Mexico	$62,500	$75,100	$89,600	$107,600	$124,300

INFORMATIONAL WEBSITES:

American Society of Mechanical Engineers	http://www.asme.org/
American Society for Engineering Education	http://www.asee.org/
Technology Student Association	http://www.tsaweb.org/
National Council of Examiners for Engineering and Surveying	http://www.ncees.org/
National Society of Professional Engineers	http://www.nspe.org/
Society of Automotive Engineers	https://www.sae.org/
Pi Tau Sigma	http://www.pitausigma.net/
Society of Manufacturing Engineers	http://sme.org/

http://onetonline.org


www.bls.gov

REFERENCES

Bureau of Labor Statistics, U.S. Department of Labor, (2012, April 10). *Occupational Outlook Handbook, Mechanical Engineers*. Retrieved from http://www.bls.gov/ooh/architecture-and-engineering/mechanical-engineers.htm#tab-1

State of Minnesota, U. S. Department of Labor, Employment and Training Administration (2013). *CareerOneStop, Occupation Profile, Mechanical Engineer*. Retrieved from www.careerinfonet.org

University of New Mexico, Department of Mechanical Engineering (2013). *Department of Mechanical Engineering*. Retrieved from https://me.unm.edu/