
WHAT CAN I DO WITH A MAJOR IN ... **CIVIL ENGINEERING**

OCCUPATIONAL SUMMARY:

The [Bureau of Labor Statistics \(2013\)](#) explains that civil engineers, “design and supervise large construction projects, including roads, buildings, airports, tunnels, dams, bridges, and systems for water supply and sewage treatment.” BLS highlights that civil engineers may specialize in different areas such as geotechnical, structural, and transportation.

EMPLOYMENT REQUIREMENTS:

[Bureau of Labor Statistics \(2013\)](#) indicates that a bachelor's degree in civil engineering is the minimum formal education required to work as a civil engineer. BLS further explains that many employers value practical experience, making it important for civil engineering students to participate in internships and Co-ops while completing their degree. BLS highlights that a Professional Engineering (PE) Licensure is required for civil engineers who publicly sell their services, exercise direct control of a project, and supervise other civil engineering professionals. Furthermore, BLS 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 Department of Civil Engineering offers a Bachelor of Science (B.S.) in Civil Engineering, a Master of Science (M.S.) in Civil Engineering, and a Doctor of Philosophy (Ph.D.) in Engineering with a Civil Engineering concentration. Check 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:

Agricultural, industrial, environmental, consulting, development, project management, manufacturing, sales, railroads, telecommunications, utilities, oil companies, construction, pollution control, transportation, bridge engineering, architecture firms

Government:

Federal, national and local government agencies, Department of Energy, Department of Transportation, Environmental Protection Agency, research, [national laboratories](#)

Education:

University/college instruction or administration, researcher

SUGGESTED STRATEGIES

- Gain related civil engineering or general 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 Civil 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, and 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](#)

CIVIL ENGINEERS

Location	2012				
	10%	25%	Median	75%	90%
United States	\$51,300	\$63,000	\$79,300	\$100,300	\$122,000
New Mexico	\$53,400	\$62,800	\$77,500	\$95,000	\$120,600

INFORMATIONAL WEBSITES:

American Society of Civil Engineers	www.asce.org/
American Society for Engineering Education	www.asee.org
National Council of Examiners for Engineering and Surveying	ncees.org
National Society of Professional Engineers	www.nspe.org
New Mexico Section of the American Society of Civil Engineers	http://sections.asce.org/newmexico/
Bridge Engineering Association	http://www.bridgeengineer.org/
ASCE Structural Engineer Institute	http://www.asce.org/SEI/



<http://onetonline.org>



www.bls.gov

REFERENCES:

- Bureau of Labor Statistics, U.S. Department of Labor, (2012, March 29). *Occupational Outlook Handbook, Civil Engineers*. Retrieved from <http://www.bls.gov/ooh/architecture-and-engineering/civil-engineers.htm>
- State of Minnesota, U. S. Department of Labor, Employment and Training Administration (2013). *CareerOneStop, Occupation Profile, Civil Engineer*. Retrieved from www.careerinfonet.org
- University of New Mexico, Department of Civil Engineering (2013). *Department of Civil Engineering*. Retrieved from <http://civil.unm.edu/>