# CIVIL ENGINEERING

## What can I do with this major?

### AREAS

**ANY ENGINEERING DISCIPLINE**
- Research and Development
- Design
- Production
- Operations
- Management
- Teaching
- Consulting
- Sales and Marketing
- Law
- Manufacturing
- Healthcare

### EMPLOYERS

- Engineering companies
- Consulting companies
- Industry
- Local, state and federal government
- Colleges and universities

### STRATEGIES

- 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.

### CIVIL

- Structural
- Urban Planning
- Construction
- Environmental
- Water Resources
- Transportation
- Geotechnical

- Construction industry
- Utility companies
- Oil companies
- Telecommunications businesses
- Manufacturing companies
- Railroads
- Airports
- Road construction companies
- Engineering, architectural, consulting companies
- City, state and federal government:
  - Department of Transportation
  - Army Corps of Engineers
  - Federal Aviation Administration
  - Department of Energy

**Broad discipline providing for communities through development and improvement of services including construction, transportation, city planning, water, energy, pollution.**

- Pursue a strong background of engineering fundamentals as preparation for entering the workforce or graduate school.
- Develop the ability to communicate effectively, as civil engineers are likely to collaborate with professionals in a variety of disciplines.
- Seek experience organizing and directing people and materials through related internships, co-ops, summer jobs and leadership experiences in student organizations.
- Join the American Society of Civil Engineers to participate in projects and activities to increase marketability beyond graduation.
- Note, states may require licensing or registration.
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.