# **CIVIL ENGINEERING**

What can I do with this major?

**EMPLOYERS** 

### **AREAS**

## **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.

#### 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 work force 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.