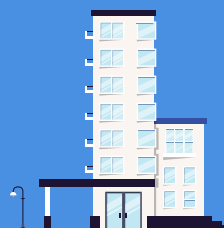
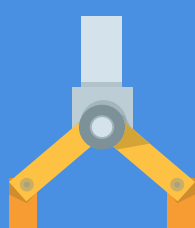
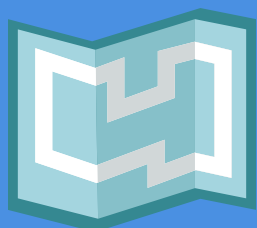


# ENGINEERING



## The engineering discipline is diverse and features great opportunity.

A bachelor's degree in engineering will provide the opportunity to work in many areas including industry, business, and government. It is critical to gain practical experience in the field while in college through internships, part-time or summer jobs, or volunteer experience. This will allow you to apply academic knowledge and skill to a professional setting, plus you will build your professional network.

A working knowledge of technical skills relevant to your specific engineering discipline is critical, as engineering has scientific and mathematical applications and involves analyzing facts, solving problems, and thinking logically. Due to emerging technologies and rapid changes in the engineering field, it's important to follow trends and stay abreast of new developments.

In addition to technical skills, it's important to develop transferable skills such as verbal and written communication, presenting, collaboration, teamwork, report writing, and leadership. Helpful traits include intellectual curiosity, creativity, technical aptitude, perseverance, and an understanding of the economic and environmental context in which engineering is practiced.

To learn more about the field students should connect with professionals, engage in additional training opportunities, and join professional associations and organizations related to engineering.

## AREAS OF OPPORTUNITY

- Aerospace
- Biomedical
- Biosystems
- Chemical
- Civil
- Computer
- Electrical
- Environmental
- Industrial & Systems
- Mechanical
- Nuclear
- Ocean

Local, State, and Federal Government  
Private Industry Companies  
Colleges and Universities  
Consulting Firms  
Research and Development Firms  
Equipment and Supply Manufacturers  
Hospitals and Healthcare Facilities  
Utility Companies  
Construction Companies  
Financial and Business Service Companies  
National Laboratories and Research Facilities  
Public Works Departments

## COMMON EMPLOYERS



## PROFESSIONAL ORGANIZATIONS



- NSPE - National Society of Professional Engineers
- NAE - National Academy of Engineering
- ASEE - American Society for Engineering Education
- IEEE - Institute of Electrical and Electronics Engineers
- APWA - American Public Works Association
- AIChE - American Institute of Chemical Engineers
- ASCE - American Society of Civil Engineers
- ASME - American Society of Mechanical Engineers
- ASABE - American Society of Agricultural and Biological Engineers
- AIMBE - American Institute for Medical and Biological Engineering
- AIAA - American Institute of Aeronautics and Astronautics
- ANS - American Nuclear Society
- AAEES - American Academy of Environmental Engineers & Scientists
- SWE - Society of Women Engineers
- SHPE - Society of Hispanic Professional Engineers
- NSBE - National Society of Black Engineers
- SASE - Society of Asian Scientists and Engineers



## STRATEGIES ON ENTERING THE FIELD

- Obtain relevant experience through internships, part-time work, and projects.
- Acquire necessary technical skills relevant to your desired discipline.
- Develop effective analytical, problem solving, and strong interpersonal skills.
- Develop leadership and teamwork skills.
- Anticipate specializing in technologies and products related to your target discipline.
- Explore resources such as LinkedIn to connect with engineering professionals and learn about companies, industries, job duties, and skills needed to succeed in the field.
- Join student and professional organizations to build relationships, skills, and your resume.
- Create a resume that highlights your skills and experience related to engineering, technical competencies, project work, and unique qualifications.