Career Paths

CHEMICAL 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.

Chemical Engineering

Example Career Paths: Bulk and fine chemicals | Consumer products | Biotechnology and pharmaceuticals | Electronics | Environmental safety and health | Fuels and energy conversion | Materials | Process design

Potential Employers: Petroleum | Food processing | Energy | Environmental | Automotive | Pulp and paper | Rubber and rubber products | Electronics | Private and national research laboratories | Federal government

Industries: Agricultural chemicals | Industrial bulk and fine chemicals | Plastics | Biotechnology | Pharmaceutical | Cosmetics | Textiles | Consumer products

Professional Associations: American Institute for Medical and Biological Engineering | American Society for Materials International | American Society of Agricultural and Biological Engineers | Association for Women in Science | Biomedical Engineering Society | Engineers Without Borders

Related Occupations: Chemical Engineer | Chemist | Manufacturing Engineer | Materials Engineer | Materials Scientist | Nuclear Engineer | Petroleum Engineer | Bioprocess Engineer | Quality Control Analyst | Chemical Technician | Agricultural Engineer | Fuel Cell Engineer | Validation Engineer | Environmental Director | Pharmaceutical Engineer | Research Scientist | Process Engineer | Formulation Technician | Process Development Scientist

Preparing for your Career

- 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.

This resource was adapted from What Can I Do With My Major.
For more, visit https://web.uri.edu/career/wcidwmm/