## CHEMICAL ENGINEERING

A degree in Engineering, Architecture or Technology provides the knowledge and tools for problem solving. Be aware that the actual work that engineers perform will vary depending on the company and industry in which they work. Some engineers work in a research or development capacity, while others serve in management roles. The work environment

also varies, including outdoor work, work in an office setting, or a combination. Students completing the degree program will have a strong background in mathematics, science, and engineering, an understanding of professional and ethical responsibilities, and the ability to communicate effectively.

## **SKILLS**

Graduates of the Chemical Engineering program are able to apply the principles of chemical thermodynamics, material transport, reaction kinetics, and system controls to various chemical

processes. This largely includes the oil and gas industry processes along with Pre-Medical School, Biomedical, Biochemical, and Petroleum Minor Options.

### **CAREER PATHS**

ASSET ENGINEER
ASSOCIATE ENVIRONMENTAL ENGINEER
CHEMICAL PROCESS ENGINEER
COMBUSTION ENGINEER
CONSULTANT
CONTROLS SYSTEM ENGINEER
DIGITAL TRANSFORMATION ADVISOR
ENGINEER
EXPLORATION PRODUCTION ENGINEER
FIELD ENGINEER
MIDSTREAM ENGINEER

PIPELINE ENGINEER
PROCESS ENGINEER
PRODUCTION ENGINEER
R&D ENGINEER
SAFETY ENGINEER
SALES/APPLICATIONS ENGINEER
SUPPLY CHAIN LEADER
SYSTEMS ENGINEER

## WHO HIRES CHEMICAL ENGINEERING MAJORS

ABB Inc.
Ascent Resources
Burns & McDonnell
Chesapeake Energy Corp.
ConocoPhillips
ExxonMobil
Georgia-Pacific
Halliburton

International Paper ONEOK Phillips 66 Pepsico Valero Energy XTO Energy Zeeco, Inc.



#### STARTING AVERAGE SALARIES

(DATA GATHERED FROM OSU CEAT GRADUATES)

2022 - \$77,150 2023 - \$82,485 2024 - \$84,497

## TIPS FOR SUCCESS IN CHEMICAL ENGINEERING

- Obtain a co-op or internship experience as an opportunity to discover career interests and to serve as a
  great resume builder.
- Collaborate with local partners to design and implement sustainable engineering projects through study abroad opportunities or Engineers Without Borders.

### **GET INVOLVED ON CAMPUS**

American Institute of Chemical Engineers (AICHE) Society of Petroleum Engineers (SPE)

Additional Resources About Chemical Engineering Careers: che.okstate.edu aiche.okstate.edu

# MARKETABLE SKILLS OF CHEMICAL ENGINEERING GRADUATES

- Perform mass/energy balances on a system
- Determine safety and risk associated with a chemical process
- Perform preliminary and detailed designs of chemical systems
- Communicate effectively and professionally on technical topics



For More Information About Biosystems at OSU:

Prospective Student Services: (405) 744-5279

Career Services: (405) 744-3858

HireOSUGrads.com