What can I do with my Major?

CHEMICAL ENGINEERING

OVERVIEW OF MAJOR

Chemical engineers differ from other engineers in that they draw upon the vast and powerful science of chemistry to solve a wide range of problems. The knowledge and duties of chemical engineers cut across many fields; they apply principles of chemistry, physics, mathematics, and mechanical and electrical engineering in their work. Chemical engineers are very versatile and are able to handle a large variety of technical problems. There is a large amount of scientific and technical knowledge inherent in this profession.

NATURE OF WORK

On a day-to-day basis the chemical engineer is asked to solve problems involving the production or use of chemicals. They design equipment and develop processes for large-scale chemical manufacturing; plan and test methods of manufacturing the products and treating the by-products; and supervise production. The setting is more often than not in a company, research institute, lab, or occasionally outdoors.

Chemical engineers are increasingly using computer technology to optimize all phases of research and production; therefore they need to understand how to apply computer skills to process analysis, automated control systems, and statistical quality control.

SAMPLE JOB TITLES

Visit O*Net and conduct an Occupation Quick Search of each job title to learn more about that career path.

Chemical Engineer
Engineering Teacher, Postsecondary
Chemical Technician
Biochemical Engineer
Environmental Scientist
Quality Control Specialist
Technical Salesperson
Computer Programming Engineer
Technology Scientist
Process Development Engineer
Consultant
Process Engineer

UCONN RESOURCES

Department of Chemical, Materials, and Biomolecular Engineering
American Institute of Chemical Engineers
Omega Chi Epsilon
Engineering Student Leadership Council
Tau Beta Pi
Society of Hispanic Professional Engineers
National Society of Black Engineers
Women in Math, Science and Engineering
Society of Women Engineers

OTHER RESOURCES

American Institute of Chemical Engineers
Chemical and Engineering News