

# What Can I Do With This **Ohio State** Major?

Bachelor of Science

## Chemical Engineering

College of Engineering

The chemical engineering program in the Department of Chemical and Biomolecular Engineering educates engineers to design, develop, and operate chemical processes by which chemicals, petroleum products, food, pharmaceuticals, and consumer goods can be produced economically and safely. Chemical engineering students study changes in the composition, energy content, or state of aggregation of materials taking into consideration the fundamentals of the nature of matter and its properties (chemistry); the forces that act on matter (physics); and the relationships between them (mathematics). Chemical engineering differs from chemistry in its emphasis on commercial applications of chemical reactions and separations and techniques for designing, operating, and controlling processes.<sup>i</sup>

### Career Areas/Job Titles:

#### Management and Industry

Operations Manager  
Sales Specialist  
Consultant

#### Communication and Media

Technical Documentation Expert

#### Health Professions

Pharmaceuticals Consultant

#### Science and Technology

Research and Development  
Design Engineer  
Pharmaceuticals Engineer  
Consumer Products Engineer  
Chemical Design Engineer  
Environmental Engineer

#### Education

Professor

#### Government/Politics

Lobbyist  
FDA Employee  
Lawyer

*\*Some careers may require licensure, certification, or further education. Talk to an advisor about specific requirements.*

### Transferable Skills:

Chemistry	Gathering Information	Planning
Engineering Fundamentals	Identifying Problems	Prioritizing Tasks
Mathematics	Research Skills	Strategic Planning/Visioning
Physics	Setting Goals	Creating Innovative Solutions
Provide/Respond to Feedback	Adaptability/Flexibility	Quantitative Reasoning
Use Technology Effectively	Attention to Detail	Analytical/Critical Thinking
Written Communication	Judgment & Decision Making	Problem Solving
Teamwork	Implementing Decisions	
Conceptualizing	Organization Skills	

*\*This is not an extensive list of transferable skills. See larger list of skills you might develop here:*

<http://ccss.osu.edu>

### Professional Links:

American Institute of Chemical Engineers: <http://www.aiche.org/>

American Chemical Society: <http://portal.acs.org/portal/acs/corg/content>

Chemical and Biomolecular Engineering Department: [www.cbe.osu.edu](http://www.cbe.osu.edu)

Electrochemical Society: <http://www.electrochem.org/>