



# What can I do with a major in Chemical Engineering

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*The information below describes typical occupations and employers associated with this major.*

*Understand that some of the options listed below may require additional training.*

*Moreover, you are not limited to these options alone when choosing a possible career path.*

## **Description of Chemical & Biochemical Engineering**

The Department of Chemical & Biochemical Engineering at Christian Brothers University (CBU) prepares you to succeed in the chemical process industries and beyond. Our recent graduates have moved on to careers in energy (petroleum refining, biofuels, natural gas processing and distribution), paper manufacturing and packaging, cosmetics and consumer products, and industrial gases and chemicals. Others have pursued advanced degrees in engineering, pharmaceutical science, and medicine. The department offers an ABET accredited Bachelor of Science in Chemical Engineering (BSChE) degree. Courses in thermodynamics, material and energy balances, fluid mechanics, heat transfer, separations, and other topics build to an individual senior project. Often these projects are done in conjunction with an industrial internship, enabling you to apply your academic training to real world problems.

As a chemical engineering (ChE) student, you may additionally opt to pursue a biochemical engineering emphasis to open pathways into biotechnology careers, including pharmaceuticals, commercial enzymes, food additives, and biofuels. The CBU biochemical engineering track includes all the course required for medical school admission, and so offers a “pre-med” option for highly motivated students.

As a ChE student you learn that teamwork is critical to professional success, and have opportunities through the AIChE (American Institute of Chemical Engineers) student chapter, SWE (the Society of Women Engineers), and other campus organizations to cultivate leadership skills. If you are interested, numerous chances to develop “soft skills” in communications, group dynamics, and leadership are available.

## **Possible Job Titles of Chemical & Biochemical Engineering Graduates (Includes Full-Time, Internships & Co-Ops)**

*(\*Jobs secured as reported by CBU Career Services post-graduate survey)*

Associate Engineer	Inside Sales Engineer*	R/D Engineer
Biochemical Process Engineer	Lead Process Engineer	Research Assistant
Biochemical Research Engineer	MTS Engineer - Data Analyst	Research Investigator
Chemical Engineer*	Pharmaceutical Biologics Engineer	Biochemical/Bioprocess Engineer
Director, Fluidic Systems Engineer	Principal Engineer	Senior Bioprocess Engineer
Engineer II/Senior Engineer	Process Development Associate	Senior Systems Engineer-Water
Engineer-Validation Tank Management	Process Development Engineer	Technical Support Engineer
Health & Safety Engineer	Process Engineer*	
	Process Engineer (Pharma)	

## **Possible Employers and Employment Settings for Chemical & Biochemical Engineering Graduates**

*(\*Jobs secured as reported by CBU Career Services post-graduate survey)*

Amgen	Hargrove Engineers + Constructors	Parsons Corporation
Ashland Water Technologies*	International Paper*	PM Group
Cisco*	Logical Systems Inc.*	Riviana Foods*
Dow Chemical*	Lucite International*	Samsung Engineering*
DuPont	Lurgi*	Scientific Search
Electrolux*	Medtronic Spinal & Biologics*	Smith & Nephew*
Experitex*	Monsanto	Steel Fabricators*
ExxonMobil Technology*	Myriant Technologies	Union Carbide
Fleischmann's Yeast	Nucor, Inc.*	Valero*
GlaxoSmithKline*	Packaging Corporation Of America	W.M. Barr*

### **Skill Sets and Interests Associated with Chemical & Biochemical Engineering Majors**

Communicate	Develop rules & guidelines	Solve problems
Listen to others, ask questions	Judge the costs and benefits	Design equipment & technology
Express ideas clearly	Innovate	Analyze user needs & requirements
Reason and Problem Solve	Measure and improve performance	Perceive and Visualize
Analyze ideas and use logic	Time Management	Identify patterns
Identify problems	Work well with people	

### **Top Career Services Resources for Chemical & Biochemical Engineering Majors**

Career Resources Library (Buckman 207)  
Handshake: <http://cbu.joinhandshake.com>  
Memphis Business Journal, Book of Lists

### **Find out what careers you might be a fit for you using:**

TypeFocus: [www.typefocus.com](http://www.typefocus.com) (Access Code: CBU8998)

### **CBU Campus Contacts Associated with Chemical & Biochemical Engineering**

CBU School of Engineering  
Nolan Engineering Center, First Floor  
(901) 321-3405

### **Additional Resources/Contacts for Chemical & Biochemical Engineering Majors**

American Institute Of Chemical Engineers: <http://www.aiche.org/>  
American Chemical Society: <http://www.acs.org/>  
Biochemical Society: <http://www.biochemistry.org/>