

What can I do with a major in

Chemical Engineering

CBU Career Services

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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 AlChE (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 Biochemical Process Engineer Biochemical Research Engineer Chemical Engineer*

Director, Fluidic Systems

Engineer

Engineer II/Senior Engineer

Engineer-Validation Tank Management

Health & Safety Engineer

Inside Sales Engineer* Lead Process Engineer MTS Engineer - Data Analyst

Pharmaceutical Biologics Engineer

Principal Engineer

Process Development Associate

Process Development Engineer

Process Engineer*

Process Engineer (Pharma)

R/D Engineer Research Assistant Research Investigator

Biochemical/Bioprocess Engineer

Senior Bioprocess Engineer Senior Systems Engineer-Water **Technical Support Engineer**

Possible Employers and Employment Settings for Chemical & Biochemical Engineering Graduates

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

Amgen

Ashland Water Technologies*

Cisco*

Dow Chemical*

DuPont Electrolux*

Experitec* ExxonMobil Technology*

Fleischmann's Yeast GlaxoSmithKline*

Hargrove Engineers + Constructors

International Paper* Logical Systems Inc.* Lucite International*

Lurgi*

Medtronic Spinal & Biologics*

Monsanto

Myriant Technologies

Nucor, Inc.*

Packaging Corporation Of America

Parsons Corporation

PM Group Riviana Foods*

Samsung Engineering* Scientific Search Smith & Nephew* Steel Fabricators* **Union Carbide**

Valero* W.M. Barr*

Skill Sets and Interests Associated with Chemical & Biochemical Engineering Majors

Communicate Develop rules & guidelines
Listen to others, ask questions Judge the costs and benefits

Express ideas clearly Innovate

Reason and Problem Solve Measure and improve performance

Analyze ideas and use logic Time Management Identify problems Work well with people

Solve problems
Design equipment & technology
Analyze user needs & requirements
Perceive and Visualize

Identify patterns

Top Career Services Resources for Chemical & Biochemical Engineering Majors

Career Resources Library (Buckman 207)

CareerLinX: https://cbu-csm.symplicity.com/students/

Memphis Business Journal, Book Of Lists

Sign up for a free account and find out what careers you might be a fit for using:

TypeFocus: www.typefocus.com (Access Code: CBU8998)

SIGI 3: www.tinyurl.com/cbusigi

CBU Campus Contacts Associated with Chemical & Biochemical Engineering

Dr. Randel M. Price - Chair, Associate Professor

Leslie M. Herlihy - Administrative Assistant

(901) 321-3412 - <u>rprice@cbu.edu</u> (901) 321-3405 - <u>ldunn@cbu.edu</u>

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/