

WHAT CAN I DO WITH MY CHEMICAL / BIOCHEMICAL ENGINEERING DEGREE?



Using the Major Sheet:

- Large headings indicate **industry** area and subheadings indicate **employers** within that area.
- Use the titles to search for careers and related careers in order to explore your options within different areas of industry. Note that some career titles have multiple names for similar positions.
- An asterisk (*) notes that additional training (certification, graduate school, high level of experience) may be needed in order to obtain this career. Make sure to thoroughly research career pathways.

CHEMICAL/BIOCHEMICAL ENGINEERING (Chemical, Cosmetics, Pharmaceutical, Agricultural Chemical, Food Processors, Government, Petroleum, Plastics, Fuel, Paper/Pulp)

Research & Development (Universities, Research Institutes, Industry)

- Development Engineer
- Petroleum Research Engineer
- Asst. Research Engineer
- Consumer Product R&D Designer
- Chemical Engineer

Design and Construction (Chemical Manufacturers)

- Project Engineer
- Asst. Design Engineer
- Process Engineer
- Designer Draftsperson
- Field Engineer
- Process Design Engineer
- Product Designer
- CAD Technician
- Automation Engineer
- Chemical Engineer
- Test Technician

Operations / Production (Manufacturers)

- Business Coordinator
- Project Engineer
- Quality Assurance Engineer
- Reliability Engineer
- Manufacturing Engineer
- Production Engineer
- Production Planner
- Quality Control Technician
- Materials Manager
- Supplier Quality Engineer
- Chemical Engineer
- Production Manager
- Field Technician
- First Line Supervisor

Environment and Waste Management (Chemical Companies, Government)

- Environmental Specialist
- Environmental Control Engineer
- Environmental Protection Officer
- Solid/Hazardous Waste Manager
- Environmental Engineer
- Chemical Engineer
- Environmental Risk Assessor
- Waste Water Treatment Engineer
- Safety Officer
- Project Engineer
- Process Engineer

ENGINEERING-RELATED

Government

- Project Engineer
- Peace Corps Volunteer
- Chemical Engineer
- Patent Reviewer
- CIA Engineer
- Mechanical Engineer

Human Resources

- Technical Recruiter
- High Tech Head Hunter

Sales / Marketing

- Sales Engineer
- High Tech Marketing Specialist
- Applications Engineer
- Technical Sales Rep.
- Product Engineer
- Market Research Analyst
- Trade Show Organizer
- Product Manager

Publishing

- Technical Writer
- Assistant Textbook Editor

OPERATIONS RESEARCH / MODELING

Consulting Firms, Large Corporations, Government, Research Organizations

- Research Assistant
- Analyst Assistant
- Market Forecaster

MANUFACTURING - PURCHASING & MATERIALS MGT.

- Operations Research Analyst
- Inventory Manager
- Assistant Quality Assurance Manager
- Industrial/Wholesale Buyer
- Assistant Buyer
- Line Supervisor
- Purchasing Agent
- Purchasing Price Analyst
- Traffic Manager
- Production Manager
- Contract Agent
- Cost Estimator

BANKING / REAL ESTATE / INSURANCE / FINANCE

- Assistant Loan Officer
- Operations Manager
- Mortgage Banker/Officer
- Claims Adjudicator
- Claims Rep / Examiner
- Commodity Broker
- Mortgage Broker
- Systems Consultant
- Real Estate Analyst/Broker
- Insurance Broker
- Securities Analyst
- Credit Analyst
- Appraiser
- Underwriter
- Insurance Agent
- Financial Analyst

Preparation for a Competitive Job Market:

- **Focus on transferable skill sets** as you pursue a degree in Chemical/Biochemical Engineering.
- **Obtain relevant internship, co-op, or volunteer experiences.**
- **Supplement Chemical/Biochemical Engineering coursework** with **classes relevant** to your career.
- **Meet with a Career Specialist** to explore options, make decisions, and prepare for career choices.

Additional Career Center Resources:

- **Major Sheets (ENCH, BIOC, BTEC, CHEM, GEOG):** <https://careers.umbc.edu/tools/majors/>

- **The Vault:** <https://careers2.umbc.edu/tools/vault/>

- Use the top search bar to find these relevant guides:

- ["Vault Guide to Engineering Jobs"](#)
- ["Vault Guide to Chemistry Jobs"](#)
- ["Vault Guide to Nuclear Power Jobs"](#)
- ["Vault Guide to Mathematics and Physics Jobs"](#)
- ["Vault Guide to Waste Management Jobs"](#)
- ["Vault Guide to Energy Jobs"](#)
- ["Vault Guide to Plastics Industry Jobs"](#)
- ["Vault Guide to Chemicals Industry Jobs"](#)
- ["Vault Guide to Medical Equipment Manufacturing Jobs"](#)
- ["Vault Guide to Rubber Industry Jobs"](#)

- **Professional Associations:**

American Institute of Chemical Engineers: <http://www.aiche.org/>
National Society of Professional Engineers: <http://www.nspe.org/>
National Society of Black Engineers: www.nsbe.org
Society of Women Engineers: <http://societyofwomenengineers.swe.org/>
American Chemical Society: <http://www.acs.org/content/acs/en.html>