

# CHEMISTRY

## What can I do with this degree?

### AREAS

### EMPLOYERS

### STRATEGIES

#### ANALYTICAL

Research  
Development  
Analysis and Testing  
Consulting  
Environmental  
Forensics

Federal, state, and local government  
Federal agencies including National Aeronautics and Space Administration  
Manufacturing firms including textile, petroleum, food, electronics, glass, paper, packaging, machinery, cosmetics, paint, drug, and chemical industries  
Industrial production and inspection agencies  
Research laboratories and organizations  
Environmental protection organizations  
Colleges and universities

Learn federal, state, and local government job application process.  
Gain experience in a laboratory.  
Become proficient with high-tech scientific equipment.  
Take electives in your area of interest.

#### BIOCHEMICAL

Research  
Development  
Analysis and Testing  
Consulting  
Quality Control  
Medical  
Environmental  
Industrial Health & Safety  
Hospital Administration

Research laboratories and organizations  
Pharmaceutical and medical research firms  
Biotechnology firms  
Plant and animal breeders and growers  
Food processors  
Industrial production and inspection agencies  
Environmental protection organizations  
Federal, state and local government, such as the Centers for Disease Control  
Colleges and universities

Take additional courses in biology, biochemistry, molecular biology, genetics, cytology, and physiology.

#### ORGANIC

Research  
Development  
Analysis and Testing  
Quality Control  
Consulting

Industries related to petroleum, coal, wood products, plastics, textiles, and food  
Manufacturing firms developing new synthetic materials and new production processes  
Research organizations  
Federal and state government  
Colleges and universities

Gain additional laboratory and research experience through internships and summer jobs.

**AREAS**

**EMPLOYERS**

**STRATEGIES**

GEOCHEMISTRY

Environmental Remediation  
Research & Development  
Analysis & Testing

Environmental organizations  
Water processing plants  
Natural resources organizations

Take Geology & Environmental Science electives.

INORGANIC

Research  
Analysis and Testing  
Quality Control  
Consulting

Research laboratories and organizations  
Industries involved in mining, electronics, and synthetic materials  
Federal and state government  
Colleges and universities

Choose appropriate coursework to specialize in an area.  
Develop additional laboratory skills and experience.

POLYMER CHEMISTRY

Research & Development  
Analysis & Testing

Industrial & commercial organizations such as textiles and plastics

Gain research experience.

PHYSICAL

Research  
Development  
Analysis and Testing  
Quality Control  
Consulting

Research laboratories and organizations  
Industries involving electrical, nuclear, gas, heat, or light energy  
Federal government  
Colleges and universities

Take related courses in social sciences and economics.  
Obtain strong mathematical background.

EDUCATION

Teaching  
Research  
Administration

Private and public secondary schools  
Colleges and universities

Obtain certification/licensing for teaching in public schools.  
Acquire a master's degree for community college teaching and a Ph.D. for colleges and universities.

BUSINESS

Technical Sales/Marketing  
Pharmaceutical Sales  
Management  
Banking/Finance  
Advertising/Public Relations  
Consulting  
Industrial Quality Control  
Research & Development

Manufacturing firms  
Drug stores  
Medical/Pharmaceutical supply companies  
Industries including textiles, petroleum, food, electronics, glass, paper, packaging, machinery, cosmetics, paint, drugs, and chemicals.  
Agricultural product companies  
Environmental management organizations  
Waste management firms

Take courses in public speaking.  
Obtain a minor in business.  
Develop strong verbal and written communication, interpersonal, and organizational skills.  
Hold leadership positions in campus organizations.  
Join related student organizations, e.g., American Marketing Association, Financial Management Association, Public Relations Student Society of America, etc.

## AREAS

## EMPLOYERS

## STRATEGIES

### TECHNICAL WRITING

Proposals  
Specification Manuals  
Writing  
Editing

Research product development departments and organizations  
Publishing firms including books, scientific and research journals, technical press, large newspapers, and wire services

Take advanced technical writing courses.  
Become proficient with word processing and desktop publishing.

### LAW

Patent Agents  
Patent Attorneys  
Legislator/Lobbyist

Manufacturing firms  
Research and development firms  
Law firms  
Private practice  
Environmental agencies

Obtain law degree to become an attorney.

### INFORMATION SPECIALISTS/TECHNICAL LIBRARIES

Special libraries  
Research organizations  
Colleges and universities  
Large manufacturing firms, especially chemicals and pharmaceuticals

Obtain master's degree in library and information science.  
Develop computer retrieval skills.  
Join Special Libraries Association, Chemistry Division.

### GENERAL INFORMATION

- Undergraduate degree sufficient for entry-level positions such as lab coordinator, research assistant, product testing or analysis, technical sales, or service representative.
- Master's degree sufficient for most applied research positions, industrial work, and some community college teaching.
- Ph.D. degree required for university teaching and advanced positions in management and research and development.
- Advanced degrees help speed career advancement.
- Develop strong computer, mathematics and science skills/knowledge.
- Obtain part-time, volunteer, co-op, internship, or summer experience.
- Obtain practical experience using various laboratory equipment and high-tech scientific equipment and data.
- Maintain excellent grades.
- Complete an undergraduate research project.
- Postdoctoral experience is preferred for research positions in industry, universities and government.
- Consider electives in computer science, engineering, business, public speaking, and writing.
- Join related student professional organizations.
- Read related professional magazines and literature.