

# CHEMISTRY

## What can I do with this major?

### 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

Familiarize yourself with federal, state, and local government job application processes.  
Gain experience in a laboratory setting.  
Develop proficiency 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.  
Develop excellent laboratory and computer skills.  
Get involved with undergraduate research with professors.  
Join related professional organizations.  
Complete a related internship with an organization in the area of your interest.

#### 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.  
Get involved with undergraduate research with professors.

**AREAS**

**EMPLOYERS**

**STRATEGIES**

**GEOCHEMISTRY**

Environmental Remediation  
Research & Development  
Analysis & Testing

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

Take geology & environmental science  
electives.

**INORGANIC**

Research  
Analysis and Testing  
Quality Control  
Consulting

Environmental organizations  
Water processing plants  
Natural resources organizations

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

**POLYMER CHEMISTRY**

Analysis & Testing  
Research & Development

Industries involving textiles and plastics

Gain research experience through internships,  
part-time employment, and summer jobs.

**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.  
Develop 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.  
Take courses in public speaking.

**BUSINESS**

Technical Sales/Marketing  
Pharmaceutical Sales  
Management  
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

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**

Writing  
Editing

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

Take advanced technical writing courses.  
Develop word processing and desktop publishing skills.

### **LAW**

Patent Law  
Legislation and Lobbying

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.
- Maintain high grade point average and secure strong recommendations for graduate school.
- Master's degree sufficient for most applied research positions, industrial work, and some community college teaching.
- Find research opportunities with professors and other experts in the field to gain experience.
- Ph.D. degree required for university teaching and advanced positions in management and research and development. Postdoctoral experience is preferred for research positions in industry, universities, and government.
- 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.
- Complete an undergraduate research project.
- Consider electives in computer science, engineering, business, public speaking, and writing.
- Join related student professional organizations.