



What can I do with a degree in ...

Chemistry

The Department of Chemistry prepares its majors with a thorough and rigorous background in undergraduate studies in chemistry, so they may successfully pursue graduate studies in chemistry and related sciences or begin careers as professional chemists.

The department also provides quality service courses and services for majors in related departments, such as students interested in physics, engineering, biology, medicine, the allied health professions, etc. Our service courses bear no distinction from the regular courses. It is rather the objective of the student which determines whether he considers any course in chemistry to be, for him, a service course. An important part of the philosophy of our approach is that the chemistry major have a broad background in mathematics and physics, while he is still an undergraduate. Toward this goal, our more serious majors complete the requirements for a cognate major in mathematics and/or physics.

Job Types

ANALYTICAL

Research
Development
Analysis and Testing
Consulting
Environmental
Forensics

Where to find them

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

Ways to Prepare

- 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.

Job Types

GEOCHEMISTRY

Environmental Remediation
Research & Development
Analysis & Training

Where to find them

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

Ways to Prepare

- Take geology & environmental science electives.

Job Types

BIOCHEMICAL

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

Where to Find Them

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 agencies
Federal, state and local governments, such as
the Centers for Disease Control
Colleges and universities

Ways to Prepare

- Take additional courses in 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.

Job Types

ORGANIC

Research
Development
Analysis and Testing
Quality Control
Consulting

Where to Find Them

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

Ways to Prepare

- Gain additional laboratory and research experience through internships and summer jobs.
- Get involved with undergraduate research with professors.

Job Types

INORGANIC

Research
Analysis and Testing
Quality Control
Consulting

Where to Find Them

Environmental organizations
Water processing plants
Natural resources organizations

Ways to Prepare

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

Job Types

POLYMER CHEMISTRY

Analysis & Testing
Research & Development

Where to Find Them

Industries involving textiles and plastics

Ways to Prepare

- Gain research experience through internships, part-time employment, and summer jobs. (Chemistry, page 2)

Job Types

EDUCATION

Teaching
Research
Administration

Where to Find Them

Private and public secondary schools
Colleges and Universities

Ways to Prepare

- Obtain appropriate state license and/or certification for public school teaching positions.
- Acquire a master's degree for community college teaching and a PhD for colleges and universities.
- Take courses in public speaking.
- Volunteer to teach, supervise, or tutor with organizations such as Big Brother/Sister, YMCA, or churches.
- Develop excellent written and oral communication skills.
- Learn to work well with all types of people.

Job Types

PHYSICAL

Research
Development
Analysis and Testing
Quality Control
Consulting

Where to Find Them

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

Ways to Prepare

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

Job Types

BUSINESS

Technical Sales/Marketing
Pharmaceutical Sales
Management
Consulting
Industrial Quality Control
Research & Development

Where to Find Them

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

Ways to Prepare

- 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.

Job Types

TECHNICAL WRITING

Writing
Editing

Where to Find Them

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

Ways to Prepare

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

Job Types

LAW

Patent Law
Legislation and Lobbying

Where to Find Them

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

Ways to Prepare

- Obtain law degree to become an attorney.

Job Types

INFORMATION SPECIALISTS/ TECHNICAL LIBRARIES

Where to Find Them

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

Ways to Prepare

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

The field of chemistry is constantly changing, and the information listed above does not exhaust possible career options. Be sure to speak with your department chair or academic advisor for further guidance on course selections, as well as career planning.