What Can I Do With A Degree In Chemistry?

Analytical Areas
- Research
- Development
- Analysis and Testing
- Consulting
- Environmental
- Forensics

Employers
- Federal, state, and local government
- Federal agencies including National Aeronautics and Space Administration
- Manufacturing firms
- Industrial production and inspection agencies
- Research laboratories and organizations
- Environmental protection organizations
- Colleges and universities

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

Employers
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

Strategies
- 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
Areas
Research Development
Analysis and Testing
Quality Control
Consulting

Employers
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

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

Geochemistry
Areas
Environmental Remediation
Research & Development
Analysis & Testing

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

Strategies
- Take geology & environmental science electives.

Inorganic
Areas
Research
Analysis and Testing
Quality Control
Consulting

Employers
Environmental organizations
Water processing plants
Natural resources organizations
Strategies
- Choose appropriate coursework to specialize in an area.
  Develop additional laboratory skills and experience.

**Polymer Chemistry**
Areas
Analysis & Testing
Research & Development

**Employers**
Industries involving textiles and plastics

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

**Physical**
Areas
Research
Development
Analysis and Testing
Quality Control
Consulting

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

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

**Education**
Areas
Teaching
Research
Administration

**Employers**
Private and public secondary schools
Colleges and universities

**Strategies**
- 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**
Areas
Technical Sales/Marketing
Pharmaceutical Sales
Management
Consulting
Industrial Quality Control
Research & Development

**Employers**
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
Strategies
- 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.

Technical Writing
Areas
- Writing
- Editing

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

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

Law
Areas
- Patent Law
- Legislation and Lobbying

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

Strategies
- Obtain law degree to become an attorney.

Information Specialists
Areas
- Technical Libraries

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

Strategies
- 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.

Prepared by the Career Planning staff of Career Services at The University of Tennessee, Knoxville.

**Careers in Chemistry**

California Employment Development Department - Chemists
www.calmis.cahwnet.gov/file/occguide/Chemist.htm

California Employment Development Department - Chemical Engineers.
http://www.calmis.cahwnet.gov/file/occguide/Engchem.htm

Career & Job Search Advice

University of Illinois - Chemistry as a Career
http://www.chemistry.illinois.edu/undergrad/career.html

Occupational Outlook Handbook - Look for “Chemical”
http://www.bls.gov/oco/ocoic.htm#C

O’Net
http://online.onetcenter.org/find/stem?t=4&g=Go

UC Berkeley - Exploring Career fields
https://career.berkeley.edu/Engineering/Engineering.stm#chem

Wetfeet.com

**Exploring Majors**

What Can I Do With a Major in...
http://www.k-state.edu/acic/majorin/chemistry.htm

Major Resource Kits
http://www.udel.edu/CSC/chem.html

What Can I Do With A Major In

Career Opportunities For Majors In Chemical Engineering
http://careerservices.rutgers.edu/mh/chemical_engineering.shtml

Career Opportunities For Majors In Chemistry
http://careerservices.rutgers.edu/mh/chemistry.shtml

**Job Postings**

SMC Student Job Search - www.stmarys-ca.edu/studentjobs

AAAS
http://www aaas.org/careercenter/

ACS
http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_p ageLabel=PP_JOBSEEKERS&node_id=112&use_sec=false&sec_url_var=region1&__uuid=2bbb79c9-2490-4362-b4ad-de2f705b2afc

Medzilla - www.medzilla.com/

Nature Jobs
http://www.nature.com/naturejobs/career-toolkit/index.html

ScienceJobs.com
http://www.newscientistjobs.com/jobs/default.aspx

BioSpace
www.biospace.com
ChemistryJobs.com  
http://www.chemistryjobs.com/

The Scientist - Careers  
http://career.thesescientist.com/jobseekerx/SearchJobsForm.asp

The Chemistry Guide  
http://www.chemistryguide.org/jobs-in-chemistry.html

**Professional Association Information**

American Chemical Society  
www.acs.org/

American Institute of Chemical Engineers  
www.aiche.org/

Association of Consulting Chemists & Chemical Engineers  
www.chemconsult.org/

The Royal Society of Chemistry (RSC)  
www.rsc.org/

The Association for Women In Science  
http://www.awis.org/