## CHEMISTRY

**What can I do with this degree?**

### AREAS

#### ANALYTICAL
- Research
- Development
- Analysis and Testing
- Consulting
- Environmental
- Forensics

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

#### ORGANIC
- Research
- Development
- Analysis and Testing
- Quality Control
- Consulting

### EMPLOYERS

- 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

### EMPLOYERS (continued)

- 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

- 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.

- 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.

- Gain additional laboratory and research experience through internships and summer jobs.
- Get involved with undergraduate research with professors.
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<tr>
<th>AREAS</th>
<th>EMPLOYERS</th>
<th>STRATEGIES</th>
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| GEOCHEMISTRY          | Research laboratories and organizations  
Industries involved in mining, electronics, and synthetic materials  
Federal and state government  
Colleges and universities | Take geology & environmental science electives.                            |
|                       | 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             | Environmental organizations  
Water processing plants  
Natural resources organizations | Choose appropriate coursework to specialize in an area.  
Develop additional laboratory skills and experience. |
|                       | 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     | Industries involving textiles and plastics | Gain research experience through internships, part-time employment, and summer jobs. |
|                       | Research & Development | Industries involving textiles and plastics | Gain research experience through internships, part-time employment, and summer jobs. |
| PHYSICAL              | 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. |
|                       | 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             | 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. |
|                       | 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              | 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. |
|                       | 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.  
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<td><strong>TECHNICAL WRITING</strong></td>
<td>Research product development departments and organizations</td>
<td>Take advanced technical writing courses. Develop word processing and desktop publishing skills.</td>
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<tr>
<td>Writing</td>
<td>Publishing firms including books, scientific and research journals, technical press, large newspapers, and wire services</td>
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<td>Editing</td>
<td>Internet sites</td>
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<td><strong>LAW</strong></td>
<td>Manufacturing firms</td>
<td>Obtain law degree to become an attorney.</td>
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<td>Patent Law</td>
<td>Research and development firms</td>
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<td>Legislation and Lobbying</td>
<td>Law firms</td>
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<td>Private practice</td>
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<td>Environmental agencies</td>
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<td><strong>INFORMATION SPECIALISTS/TECHNICAL LIBRARIES</strong></td>
<td>Special libraries</td>
<td>Obtain master's degree in library and information science.</td>
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<td>Research organizations</td>
<td>Develop computer retrieval skills.</td>
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<td>Colleges and universities</td>
<td>Join Special Libraries Association, Chemistry Division.</td>
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<td>Large manufacturing firms, especially chemicals and pharmaceuticals</td>
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<td><strong>GENERAL INFORMATION</strong></td>
<td>Undergraduate degree sufficient for entry-level positions such as lab coordinator, research assistant, product testing or analysis, technical sales, or service representative.</td>
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<td>Maintain high grade point average and secure strong recommendations for graduate school.</td>
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<td>Master's degree sufficient for most applied research positions, industrial work, and some community college teaching.</td>
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<td>Find research opportunities with professors and other experts in the field to gain experience.</td>
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<td>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.</td>
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<td>Advanced degrees help speed career advancement.</td>
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<td>Develop strong computer, mathematics, and science skills/knowledge.</td>
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<td>Obtain part-time, volunteer, co-op, internship, or summer experience.</td>
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<td>Obtain practical experience using various laboratory equipment and high-tech scientific equipment and data.</td>
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<td>Complete an undergraduate research project.</td>
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<td>Consider electives in computer science, engineering, business, public speaking, and writing.</td>
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<td>Join related student professional organizations.</td>
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