



## CAREER *services* CENTER

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**XAVIER**  
UNIVERSITY

# CAREER OPPORTUNITIES FOR CHEMISTRY MAJORS

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## SKILLS & ABILITIES OF THE CHEMISTRY MAJOR

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### Investigation

- Remaining objective
- Reviewing relevant data
- Applying concepts
- Utilizing formulas
- Gathering information
- Observing carefully
- Asking questions
- Designing experiments
- Applying knowledge creatively

### Technical

- Maintaining precision and accuracy
- Solving quantitative problems
- Calculating
- Tabulating data
- Sampling for surveys
- Using laboratory equipment
- Processing data

### Communication

- Organizing and reporting data
- Writing for technical and non-technical audiences
- Informing and explaining
- Designing charts/graphs
- Reporting results and conclusions orally and in writing

### Analysis

- Summarizing research findings
- Attending to details
- Analyzing data
- Testing hypotheses
- Clarifying problems
- Identifying relationships between problems/solutions
- Reasoning by analogy
- Perceiving patterns/structures
- Applying logic to problems
- Evaluating data and results

*\*Partially taken from the University of Kansas University Career Center*

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## TYPES OF EMPLOYERS

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| <ul style="list-style-type: none"><li>• Private for-Profit</li><li>• Government</li><li>• Military</li><li>• Self-Employed</li></ul> | <ul style="list-style-type: none"><li>• Schools</li><li>• Colleges/Universities</li><li>• Non-Profit Organizations</li></ul> |
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## POTENTIAL CAREERS

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| <ul style="list-style-type: none"><li>Government</li><li>• Regulatory Chemist*</li><li>• Safety Inspector</li><li>• Agronomist*</li><li>• County Health Department Inspector</li></ul> | <ul style="list-style-type: none"><li>• Water Works Supervisor</li><li>• Superfund Quality Assurance Manager</li><li>• Federal Drug Administration Inspector</li></ul> | <ul style="list-style-type: none"><li>• Wastewater Treatment System Supervisor</li><li>• Occupational Safety and Health Administration Enforcement Agent</li></ul> |
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## POTENTIAL CAREERS (continued)

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Industry <ul style="list-style-type: none"> <li>• Certified Hazardous Materials Manager*</li> <li>• Pharmaceutical Research Chemist*</li> <li>• Application Chemist</li> <li>• Industrial Hygienist</li> <li>• Patent Lawyer*</li> <li>• Chemical Information Specialist*</li> <li>• Market Research Analyst</li> <li>• Sales Manager</li> <li>• Textile Dyes Analyst</li> <li>• Environmental Compliance Officer</li> <li>• Research Scientist*</li> </ul>	<ul style="list-style-type: none"> <li>• Polymer Chemist*</li> <li>• Analytical Chemist</li> <li>• Chemical Salesperson</li> <li>• Chemical Engineer*</li> </ul> Medicine and Health <ul style="list-style-type: none"> <li>• Primary Care Physician*</li> <li>• Toxicologist*</li> <li>• Environmental Risk Assessor</li> <li>• Radiation Health Specialist</li> <li>• Nurse Anesthetist*</li> <li>• Pathologist*</li> <li>• Medical Examiner*</li> <li>• Serologist*</li> <li>• Dentist*</li> <li>• Pharmacist*</li> </ul>	<ul style="list-style-type: none"> <li>• Food Scientist/Technologist</li> <li>• Life Scientist*</li> </ul> Education and Training <ul style="list-style-type: none"> <li>• Professor*</li> <li>• Art Conservator</li> <li>• Science Teacher</li> <li>• Scientific Editor</li> <li>• Program Director, Professional Society</li> <li>• Museum Education Programs Coordinator</li> <li>• Laboratory Manager</li> <li>• Technical Writer</li> </ul>
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*Additional graduate study is generally expected for those occupations marked with an \* on the above list.*

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## TOP 10 OCCUPATIONS EMPLOYING PERSONS WITH A BACHELORS IN CHEMISTRY

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Chemists, except biochemists	23.8%
Top and mid-level managers, executives, administrators	16.3%
Sales occupations, including retail	6.2%
Teachers, secondary school	6.4%
Other management-related occupations	4.6%
Miscellaneous engineers	2.9%
Insurance, securities, real estate, business services	2.8%
Other marketing and sales occupations	2.7%
Biological scientists	2.6%
Health technologists and technicians	2.6%

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## POST GRADUATION ACTIVITES

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- More than 56% of chemistry bachelor's degree holders eventually earn an advanced degree. More than 1/3 of all chemistry majors earn a doctorate or a medical doctor's degree. One in three degree holders who earn a master's degree continues their studies in chemistry; 2/3 of doctoral degrees earned are in the field of chemistry and an additional 20% in biological sciences. Few chemistry majors earn a professional degree in law.
- More than 13% of all persons who earn a bachelor's degree go on to complete a doctor of medicine degree.

*\*Taken from The College Majors Handbook (Fogg, Harrington, & Harrington) 2004*

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## RELATED BOOKS IN THE CAREER RESOURCE LIBRARY (GSC 310)

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- *Opportunities in Chemistry Careers*
- *Careers in Science*
- *Vault Guide to the Top Pharmaceuticals and Biotech Employers*
- *Careers in Focus: Chemistry*
- *Resumes for Scientific and Technical Careers*