**Career & Employment Services (CES)**
www.uleth.ca/ross/ces

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**What can I do with a Major in Chemistry?**

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**The Chemistry Program at the University of Lethbridge**

Chemists pursue the study of matter down to the level of individual atoms, and, in particular, focus on molecules, which are aggregates of elements that act as larger units. Knowledge of chemistry is required for all fields of scientific endeavor: engineering, physics, biology, and medicine. At the same time, chemistry makes use of the tools of mathematics and physics. A thorough grounding in math is an essential requirement of success in chemical studies.

Chemistry is a major for the broad-minded individual who is interested in integrating both qualitative and quantitative aspects of knowledge. In completing the Bachelor of Science in Chemistry, students will focus on the following main branches of the discipline: analytical chemistry, inorganic chemistry, organic chemistry and physical chemistry. For related career options and job titles, please see ‘What can I do with a Major in Biochemistry.’

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**Skills Developed**

- Analytical
- Aptitude for Accuracy of Details
- Aptitude for Math
- Communicate Ideas Clearly
- Computer Knowledge
- Creativity
- Curiosity
- Debate, Persuade & Mediate
- Enjoy Synthesizing Data
- Extensive Knowledge of the Scientific Method
- Formulate Scientific Problems
- Formulating & Modeling
- Interpersonal
- Laboratory Techniques & Experience
- Learn New Information & Apply it to Professional Demands
- Logical Thinker
- Numerical Computation
- Operate Scientific Equipment
- Organizational
- Organize & Interpret Scientific Data
- Problem Solving
- Research
- Technical
- Understand & Express Complex Technical Information
- Versatility
- Work Independently
- Written & Oral Communication

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**Work Environments**

Chemistry graduates are employed in a variety of sectors and industries, such as biotechnology firms, chemical or police labs, environmental protection agencies, food and agricultural companies, food and beverage companies, health protection agencies, inspection agencies, governmental organizations, manufacturing firms, medical labs and hospitals and metal firms. Graduates may pursue career options...
with natural resources organizations, oil and gas companies, pharmaceutical and medical research firms/suppliers, university/research institutions, professional publications, technical libraries, water processing plants and science museums.

**Key Areas of Specialization:**

### Entry Level Job Titles

These jobs are normally intended for new graduates and require 0 to 2 years of experience. It is important to note that many entry level positions require some related experience or demonstrated ability to perform job-related tasks. Even those positions that do not require experience will still prefer an experienced candidate, if one is available.

- Biotech Analyst
- Data Management Specialist
- Entry Level Analytical Chemist
- Entry Level Business Development Specialist
- Entry Level Chemist
- Entry Level Polymer Chemist/Engineer
- Entry Level Scientist
- Entry Level Study Technician (Animal Operations)
- Fast Track Analyst (Pharmaceuticals)
- Instrument Service Specialist
- Junior Chemist
- Junior Life Sciences Sales Specialist
- Lab Analyst – Wet Chemistry
- Lab Technician
- Laboratory Technology Specialist
- Manufacturing Chemist - Biotech
- Natural Resource Specialist/Ranger
- Oil Sample Laboratory Technician
- Pharmaceutical Consultant
- Pharmacy Customer Service Representative
- Process Chemist
- Quality Assurance Auditor
- Quality Control Technician (Food Processing)
- Regulatory Affairs Associate (Pharmaceutical)
- Regulatory Data Specialist – Biotech
- Research Assistant (Veterinary Microbiology)
- Research Technologist
- Scientific Recruiter
- Seasonal Logistics Technician (Mining)
- Stability Analyst
- Technical Officer
- Warehouse Coordinator – Narcotics Division

**Note:** The U of L offers various resources and programs to facilitate students in gaining work and volunteer experience. Find an entry level position on the CES job board or join the Management or Arts & Science Cooperative Education Programs. Summer jobs, part-time work, internship positions and volunteer experience help students to enhance their skillset and accumulate work experience for their future career.

### Related Job Titles

These jobs generally require extensive, relevant work experience and/or further education.

- Agricultural Chemist
- Agronomist
- Analytical Chemist
- Anesthetist
- Astrochemist
- Biochemist
- Bioinformatics Specialist
- Biomedical Engineer
- Biotechnology Investment Analyst
- Biologist
- Biotechnologist
- Botanist
- Brewmaster
- Cell Research Chemist
- Chemical Analyst
- Chemical Client Service Representative
- Chemical Engineer
- Chemical Equipment Operator
• Chemical Plant & Systems Operator
• Chemical Safety Engineer
• Chemical Safety Sales Representative
• Chemical Technologist/Technician
• Chemist
• Clinical Chemist
• Clinical Research Coordinator
• Combustion Engineer
• Consultant
• Cosmetics Developer
• Crime Scene Analyst
• Criminalist
• Cytologist
• Cytotechnologist
• Drug Developer
• Energy Asset Management Professional
• Environmental Auditor
• Environmental Project Manager
• Environmental Scientist
• Flavour Chemist
• Food & Drug Analyst/Inspector
• Food Technologist/Scientist
• Forensic Lab Analyst
• Forensic Chemist/Scientist
• Geneticist
• Hazardous Materials Expert
• Health & Safety Officer
• Industrial Chemical Salesperson
• Inorganic/Organic Chemist
• Lab Coordinator
• Lecture Demonstrator
• Magnetic Resonance Technologist
• Manufacturing Supervisor
• Marine Chemist
• Medical Laboratory Technician
• Metallurgist
• Microbiologist
• Oil & Gas Industry Technician
• Nano Technology Researcher
• Narcotics Investigator
• Non-Destructive Testing Technician
• Oil Sands Technologist
• Organic Mass Spectrometrist
• Paint Formulation Chemist
• Parasitologist
• Perfumer
• Pest Control Technician
• Pharmaceutical Salesperson
• Pharmacologist
• Plant Protection Inspector
• Pollution Control Technician
• Polymer Chemistry
• Product Tester
• Prosthetics Developer
• Quality Control Technician
• Radiologist
• Regulatory Affairs Manager
• Research Assistant
• Scientific Translator
• Soil Scientist/Tester
• Specialty Chemicals Production Supervisor
• Teacher
• Technical Salesperson
• Technical Writer/Editor
• Textile Chemist
• Tissue Technologist
• Toxicologist
• University Professor
• Undergraduate Program Administrator
• Veterinary Technician
• Water Purification Specialist/Chemist
• Water Quality Analyst

Thinking Outside the Box: Other Possible Job Titles

On average, people change their careers three to five times in their lifetime. So, no matter what major you choose, you may still be interested in opportunities totally unrelated to your program of study. We encourage you to be open to all possibilities! Your undergraduate degree can be a springboard for other educational pursuits, and your transferable skills and experience can prepare you to work in a multitude of settings.

• Art Conservator
• Atmospheric Scientist
• Dentist
• Ecologist
• Environmental Compliance Inspectors
• Exploration Geophysicist
• Fisheries Consultant
• Gas Plant Operator
• Geological & Geophysical Technologist
• Hazardous Waste Management Technologist
• Health Educator
• Hematology Consultant/Technologist
• Hydrologist
• Hydrometric Technician/Technologist
• Management Analyst
• Materials Scientist
• Meteorologist
• Occupational Health & Safety Advisor
• Nuclear Monitoring Technician
• Nuclear Power Reactor Operator
• Occupational Hygienist
• Oceanographer
• Optometrist
• Patent Agent
• Pathologist
• Pathologist’s Assistant
• Petroleum Engineering Technician
• Physiologist
• Policy Advisor
Useful Resources

Recommended websites to assist in exploring the field of Chemistry and its career opportunities.

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<th>Canadian Society of Pharmacology and Therapeutics</th>
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<td><a href="http://www.rsc.org/">Chemist, Chemical Technologist</a></td>
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<td>Royal Society of Chemistry</td>
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<td><a href="http://www.rsc.org/">http://www.rsc.org/</a></td>
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Campus Resources

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### Campus Job Resources

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<td>Study Abroad &amp; Exchanges</td>
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<td><a href="http://www.uleth.ca/international/content/study-abroad-exchanges">http://www.uleth.ca/international/content/study-abroad-exchanges</a></td>
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**Career & Employment Services (CES)**

CES assists U of L students and graduates with their career exploration and work search needs.

AH154 Anderson Hall, Phone: 403-329-2000  
Mon- Fri: 9:00 a.m. to 12:00 p.m.  
1:00 p.m. to 4:00 p.m.