

## Chemistry, Bachelor of Science

Chemistry is often called the central science as it deals specifically with the 112 elements that comprise all matter. The air we breathe, water we drink, food we eat, buildings we live in, cars we drive - our very bodies - are all made from these elements. 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. Hence, knowledge of chemistry is required for all fields of scientific endeavour: 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.

### What you can be with your Chemistry, Bachelor of Science Degree:

Laboratory Technician, Chemical #2211	Technologist #2211	Research Assistant #4122/#4164	Technical Sales Person #6221
Quality Control Technologist #2233, #2211	Chemist #2112	Research Assistant	Pollution Control Technologist
Health and Safety Officer			

### With additional education and/or varying interest, I could be a:

Management Consultant #1122	Benefits Officer #1432	Marketing Specialist	Quality Control/Assurance Specialist
Public Relations Consultant #5124	Job Analyst #1121	Insurance Agent #6231	Investment Advisor #1112
Market Researcher #4163	Food Scientist/Technologist	Mineralogist	Patent Examiner
Academic Advisor #4143	Educator/Trainer #4131	Alumni Relations Officer	Writer #5121
Reporter #5123	Journalist #5123	Editor #5122	Technical Writer #5121
Broadcaster #5231	Agricultural Scientist #2121	Health Programs Operations Manager #0411	Quality Control Manager #0212
Plant Manager #0911	Forensic Laboratory Technician #2211	Professor #4121/Teacher #4141	Patent Agent #4161
Scientific Consultant #4161	Environmental Medicine Specialist #3111	Physician #3111	Pharmaceutical Chemist #2112

This career/job listing is only a sample of the possible career options; these are certainly not the only career/job options accessible with this degree/diploma. Some of the careers listed require further education.

For career information, enter the four digit number listed below in the Alberta Learning Information Services Website ([www.alis.alberta.ca](http://www.alis.alberta.ca)) or the National Occupational Classification Website (<http://www5.hrsdc.gc.ca/NOC/>).

RDC Career Services can help you explore your interests, identify your goals, discuss your career options and job search strategies and discover how to make the most of your education. Email or give us a call to connect with a career counsellor.

RDC Department Information: Chemistry, Bachelor of Science Degree [rdc.ab.ca/programs/sciences](http://rdc.ab.ca/programs/sciences)

### Potential employers:

Chemical Industries	Health Industries	Textile Industries	Pulp & Paper Industries
Natural Resources Organizations	Environmental Protection Organizations	Chemical Equipment Manufacturers	Food & Beverage Manufacturers
Aerospace Firms	Biotechnology Firms	Law Firms	Waste Management Firms
Electronic Companies	Agricultural Products Companies	Oil & gas Companies	Pharmaceutical Companies
Quality Control Laboratories	Educational Institutions		

### Major Skills Obtained from Chemistry, Bachelor of Science Degree Program

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| <ul style="list-style-type: none"> <li>■ Willingness to take risks</li> <li>■ Take pleasure in learning new skills</li> <li>■ Sensitive to health and safety of others</li> <li>■ Patience</li> <li>■ Curiosity</li> <li>■ Developing theories</li> <li>■ Perseverance</li> <li>■ Analytical skills</li> <li>■ Follow through skills</li> <li>■ Observation and decision making</li> <li>■ Work independently and in groups</li> <li>■ Oral and written communication</li> <li>■ Remain objective</li> </ul> | <ul style="list-style-type: none"> <li>Structures &amp; properties of atoms &amp; molecules</li> <li>Ability to interpret &amp; predict behavior of matter</li> <li>Organize, analyze and interpret scientific data</li> <li>Strong mathematical background</li> <li>Science and math ability</li> <li>Conduct research</li> <li>Utilizing formulas</li> <li>Perform experiments</li> <li>Process data</li> <li>Technological skills</li> <li>Planning and ability to adapt teaching methods and modalities to the various learning styles of students</li> </ul> |
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### Professional Associations and Sites of Interest

Chemical Institute of Canada - [www.chemistry.ca](http://www.chemistry.ca)  
 Ordre des chimistes du Québec - <http://ocq.qc.ca/fr/>  
 The Chemical Institute of Canada Edmonton Section - [www.cicedmonton.org](http://www.cicedmonton.org)  
 National Research Council - [www.nrc-cnrc.gc.ca](http://www.nrc-cnrc.gc.ca)  
 American Chemical Society - [www.acs.org](http://www.acs.org)  
 AlbertaResearch Council - [www.albertatechfutures.ca](http://www.albertatechfutures.ca)  
 Nova Chemicals - [www.novachem.com](http://www.novachem.com)  
 Central Labs - <http://www.c-labs.ca/careers.htm>  
 Canadian Intellectual Property Office - [www.cipo.ic.gc.ca](http://www.cipo.ic.gc.ca)  
 Southern AB Mass Spectrometry Centre (SAMS) - [www.sams.ucalgary.ca](http://www.sams.ucalgary.ca)

Academy for Mathematics & Science - [www.tutoringacademy.ca](http://www.tutoringacademy.ca)  
 Hoffman-La Roche Ltd. - [www.rochecanada.com](http://www.rochecanada.com)  
 Colgate-Palmolive Canada Inc. - [www.colgate.ca](http://www.colgate.ca)  
 Norwest Labs - [www.contractlaboratory.com](http://www.contractlaboratory.com)  
 Cosmetics Laboratories - [www.cosmeticalabs.com](http://www.cosmeticalabs.com)  
 Iogen Corporation - [www.io-gen.ca](http://www.io-gen.ca)  
 Cangene Corporation - [www.cangene.com](http://www.cangene.com)  
 Bodycote Testing Group - [www.bodycote.com](http://www.bodycote.com)  
 Canbra Foods Ltd. - [www.canola.com](http://www.canola.com)  
 Campbell Soup Company Ltd. - [www.campbellsoup.ca](http://www.campbellsoup.ca)

Information adapted from <http://caps.mcgill.ca/handouts/whattodo/chemistry.pdf> <http://www.uleth.ca/ross/ces/majors/chemistry.pdf>; <http://www.uleth.ca/fas/chm/>