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:

<table>
<thead>
<tr>
<th>Laboratory Technician, Chemical #2211</th>
<th>Technologist #2211</th>
<th>Research Assistant #4122/#4164</th>
<th>Technical Sales Person #6221</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Control Technologist #2233, #2211</td>
<td>Chemist #2112</td>
<td>Research Assistant</td>
<td>Pollution Control Technologist</td>
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<tr>
<td>Health and Safety Officer</td>
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</table>

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

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

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) 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

Potential employers:

<table>
<thead>
<tr>
<th>Chemical Industries</th>
<th>Health Industries</th>
<th>Textile Industries</th>
<th>Pulp &amp; Paper Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources Organizations</td>
<td>Environmental Protection Organizations</td>
<td>Chemical Equipment Manufacturers</td>
<td>Food &amp; Beverage Manufacturers</td>
</tr>
<tr>
<td>Aerospace Firms</td>
<td>Biotechnology Firms</td>
<td>Law Firms</td>
<td>Waste Management Firms</td>
</tr>
<tr>
<td>Electronic Companies</td>
<td>Agricultural Products Companies</td>
<td>Oil &amp; gas Companies</td>
<td>Pharmaceutical Companies</td>
</tr>
<tr>
<td>Quality Control Laboratories</td>
<td>Educational Institutions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Major Skills Obtained from Chemistry, Bachelor of Science Degree Program

- Willingness to take risks
- Take pleasure in learning new skills
- Sensitive to health and safety of others
- Patience
- Curiosity
- Developing theories
- Perseverance
- Analytical skills
- Follow through skills
- Observation and decision making
- Work independently and in groups
- Oral and written communication
- Remain objective

Structures & properties of atoms & molecules
- Ability to interpret & predict behavior of matter
- Organize, analyze and interpret scientific data
- Strong mathematical background
- Science and math ability
- Conduct research
- Utilizing formulas
- Perform experiments
- Process data
- Technological skills
- Planning and ability to adapt teaching methods and modalities to the various learning styles of students

Professional Associations and Sites of Interest

- Chemical Institute of Canada - www.chemistry.ca
- Ordre des chimistes du Québec - http://ocq.qc.ca/fr/
- The Chemical Institute of Canada Edmonton Section - www.cicedmonton.org
- American Chemical Society - www.acs.org
- AlbertaResearch Council - www.albertatechfutures.ca
- Nova Chemicals - www.novachem.com
- Central Labs - http://www.c-labs.ca/careers.htm
- Canadian Intellectual Property Office - www.cipo.ic.gc.ca
- Southern AB Mass Spectrometry Centre (SAMS) - www.sams.ucalgary.ca
- Academy for Mathematics & Science - www.tutoringacademy.ca
- Hoffman-La Roche Ltd. - www.rochecanada.com
- Colgate-Palmolive Canada Inc. - www.colgate.ca
- Norwest Labs - www.contractlaboratory.com
- Cosmetica Laboratories - www.cosmeticalabs.com
- Iogen Corporation - www.iogen.ca
- Cangene Corporation - www.cangene.com
- Bodycote Testing Group - www.bodycote.com
- Canbra Foods Ltd. - www.canola.com
- Campbell Soup Company Ltd. - www.campbellsoup.ca