

Biomedical Engineering, Bachelor of Science

Biomedical engineers are professionally trained to combine the rigors of medical and biological studies with the power of engineering analysis and design. Students choose biomedical engineering to be of service to others, to enjoy the excitement of understanding living systems, and to use state-of-the-art science and technology to solve the complex problems of medical care.

The emphasis in biomedical engineering is on finding solutions by researching, testing, and applying medical, biological, chemical, electrical, and materials information. With so many areas of specialization within the field, graduates are encouraged to further their education by attending graduate or professional school.

What you can be with your Biomedical Engineering, Bachelor of Science:

Clinical Engineer #2148	Physicist #2111	Sport Medicine #3111	Biologist #2121
Chemical Engineer #2134	Engineering Physicist #2148	Industrial Engineer #2141	Physician #3112
Mechanical Engineer #2232	Biomedical Engineering Technologist #2241	Design Engineer #2132	Manufacturing Engineer #2141
Applications Engineer #2173	Plant Engineer #2141	Sales Engineer #6221	

Potential employers:

Advertising Agencies	Magazines/Newspapers	Libraries	Law Firms
Book Publishers Theatres	Public Relations Firms	Medical Institutions	Educational Institutions
Engineering Firms	Government Agencies	Non Profit Organizations	Radio and TV Communications
Accounting Firms	Insurance Agencies	Hospitals	Financial Service Companies

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: Biomedical Engineering, Bachelor of Science rdc.ab.ca/programs/sciences

Major Skills Obtained from a Biomedical Engineering, Bachelor of Science Degree Program

- Able to solve complex problems
- Ability to search for better ways to solve problems
- Superior critical thinking
- Able to use scientific rules and methods to solve problems
- Great judgment and decision making skills
- Active listener
- Able to analyze needs and product requirements to create a design
- Great communication skills, able to convey information effectively

Able to use mathematics to solve problems
 Able to determine how a system should work and how changes in conditions will affect outcomes
 Great deductive and inductive reasoning skills
 Able to detect when something is wrong or is likely to go wrong
 Able to arrange things or actions in a certain order or pattern according to a specific rule or set of rules
 Superior organizational skills
 Superior creativity skills

Professional Associations and Sites of Interest

Engineering Institute of Canada <http://www.eic-ici.ca/>

Medical Research Council of Canada
<http://www.cihr-irsc.gc.ca/e/193.html>

Canadian Medical and Biological Engineering Society <http://www.cmbes.ca/>

Association of Consulting Engineers of Canada
<http://www.acec.ca/en/>

Association of Professional Engineers, Geologists and Geophysicists of Alberta

<http://www.apegga.org/>

Association of Science and Engineering Technology Professional of Alberta

<http://www.aset.ab.ca/pages/home/default.aspx>

Biogenie Srdc Inc. http://www.englobe-remediation.co.uk/s_83.asp

Biowarecorp.

http://www.bioware.com/bioware_info/jobs/

Canadian Hydro Developers, Inc.

<http://www.transalta.com/careers>

Isotechnika Inc.

<http://www.isotechnika.com/employment>

A.D.Williams Engineering Inc. <https://careers-williamsengineering.icims.com/jobs/intro>

Aitec (Western) Inc

http://www.aitec.ca/team_employment.htm

Alberta Motor Association

http://www.ama.ab.ca/cps/rde/xchg/ama/web/careers.htm?link=Top_HP

Camdon Construction Ltd

<http://www.camdon.ca/careers.php>

Concord Well Servicing Ltd.

<http://www.concordwell.com/careers/job-listings/>

Crimtech Services Ltd.

<http://www.crimtech.com/jobs/index.php>

Ledcor Alberta Limited

<http://www.ledcor.com/en/careers#>

Northland Energy Corporation

<http://www.northlandpower.ca/WhoWeAre/Careers/Uniq ueCareers.aspx#m=1&s=5>

Northwest Pipe and Supply Ltd.

<http://www.nwp.ca/employment.php>

Information adapted from <http://online.onetcenter.org/link/summary/17-2031.00> <http://www.worldwidelearn.com/online-education-guide/engineering/bioengineering-major.htm> http://www.ncsu.edu/majors-careers/do_with_major_in/showmajor.php?id=21 <http://www.canadian-universities.net/Employment/Engineering/index.html>