



HEALTH CAREER OPTIONS GUIDE

for internationally educated health professionals

Biological Technician

This profession is also known as:

- agricultural technician
- agricultural technologist
- agrology technician
- aquaculture technician
- bacteriological technician
- biological laboratory technologist
- botanical technician
- fish hatchery technician
- fisheries technician
- food bacteriological technician
- microbiology quality control technologist
- microbiology technologist (except medical)
- plant breeding technician
- seed technologist
- wildlife biology technician



What is a biological technician?

Biological technicians provide technical support and services to scientists, engineers and other professionals working in fields such as agriculture, resource management, environmental protection, plant and animal biology, microbiology, cell and molecular biology and health sciences. They may work independently in these fields, as well.

What are the main duties of a biological technician?

A technician may be different duties based on education, training and experience.

As a Biological technician, you might perform some or all of the following duties:

- Assist in conducting biological, microbiological and biochemical tests and laboratory analyses.
- Perform limited range of technical functions in support of agriculture, plant breeding, animal husbandry, biology, biomedical research and environmental protection.

- Assist in conducting field research and surveys to collect data and samples of water, soil, and plant and animal populations.
- Assist in analysis of data and preparation of reports.

Where do biological technologists and technicians work?

They work in both laboratory and field settings of government agencies, manufacturers of food products, chemicals and pharmaceuticals, biotechnology companies, health, research and educational institutions, environmental consulting companies, and resource and utilities companies.

What are the typical work conditions?

Work conditions vary depending on your field of study. You may work in a laboratory setting or in the field. Field work may be seasonal and may require knowledge of safety measures to guard against exposure to harmful elements. It may also involve travel to remote locations. Hours of work also vary and may include evenings and weekends.

What qualifications do I need?

- Completion of a two- to three-year college program in a field related to agriculture, biology, microbiology, wildlife or resource management is usually required for employment as a biological technologist.
- Completion of a one- to two-year college program in a related field is required for employment as a biological technician.
- Certification with provincial associations is available, but voluntary.



What communication skills do I need?

- Biological technicians must be able to understand and follow the instructions of their managing scientists.
- You should be able to communicate the processes and findings in written reports, clearly and accurately.

What is the wage for this work?

- Average Canadian hourly wage: **Low \$14.00 Median \$22.00 High \$36.00**
<http://www.jobbank.gc.ca/show-search-results.do?reportOption=wage&titleKeyword=2221&searchJobTitle=Search>
 (Wages may vary by occupation)
- Career Outlook
http://www.jobbank.gc.ca/LMI_report_bynoc.do?noc=2221&reportOption=outlook
<http://occupations.esdc.gc.ca/sppc-cops/occupationssummarydetail.jsp?&tid=86>

Are there any opportunities for advancement?

There is limited opportunity to move between occupations in this group.

Some technologists and technicians who work in support of government and academic research in biology are university graduates. Advancement may depend on further education and training.

Learn more about paramedics in Canada by viewing these sites.

- National Occupation Code: 2221
The government of Canada has given a code to each occupation/profession in Canada. You can find more information about biological technologists and technicians on government sites by using this code
<http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/QuickSearch.aspx?val65=2221>

Also see:

- <http://www.eco.ca/career-profiles/biological-technician/>
- <https://occinfo.alis.alberta.ca/occinfopreview/info/browse-occupations/occupation-profile.html?id=71001558>
- <https://saskcareers.ca/occupation/2599/Biological%20Technician/about-the-job>
- <https://careers.novascotia.ca/occupation/110>

References:

- Outline from [CSMLS webpage](http://altcareers.csmls.org/careers/assayer/), Accessed 3/25/2016
<http://altcareers.csmls.org/careers/assayer/>
- Government of Canada, NOC
<http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/QuickSearch.aspx?val65=2221>
- Government of Canada, Job Bank
http://www.jobbank.gc.ca/job_search_results.do;jsessionid=166907BB3D0A316C79256FC35D7FA659.imnav1?searchstring=2221&sort=M&button.submit=Search
- Government of Alberta - Adult learning
<https://occinfo.alis.alberta.ca/occinfopreview/info/browse-occupations/occupation-profile.html?id=71001558>