

**W**hen you bite into an apple, you probably do not think about the science that went into helping it grow or keeping it fresh. When you go swimming at the beach, you might not wonder who measures the water quality and makes sure it is safe for recreation.

These are just two examples of the broad area of biological sciences. Biological science technologists and technicians are professionals who specialize in a number of areas such as:

- Agricultural management
- Agricultural technology
- Air, water and land resources
- Biotechnology
- Environmental sciences
- Fish, wildlife and recreation
- Food technology
- Landscape and horticulture

To be a good biological science technologist or technician, you need to be curious, detail-oriented, organized and creative in your approach to problem solving. You also need good communication and interpersonal skills.

The following examples are duties that biological science technologists are qualified to perform. Biological science technicians assist with these duties...

- Conduct biological, microbiological and biochemical tests, and laboratory analyses in support of quality control in food production, sanitation, pharmaceutical production and other fields
- Perform experimental procedures in agriculture, plant breeding, animal husbandry, biology, biochemical and biomedical research
- Conduct field research and surveys to collect data and samples of water, soil, plant and animal populations
- Assist in the analysis of data and preparation of reports
- Conduct or supervise operational programs such as fish hatchery, greenhouse and livestock production programs
- Enforce regulations regarding wildlife and fisheries habitat and population protection

### Where Will You Work?

As a biological science technologist or technician, you could work for a manufacturer of food products, a pharmaceutical company or in a health research or educational facility. You might also work for an environmental consulting company or in a resource or utility company.

With some government or resource industry jobs, you may find yourself working in the field. An example would be an environmental consulting company where you might be collecting stream samples to determine the environmental impact of forestry operations.

With jobs that do not involve field work, you will spend most of your time indoors working in laboratories or processing plants. This work requires both sitting and standing. Some lifting may be required. Generally speaking, you will keep regular daytime hours, but there are some positions that require shift work. If you work in a production-oriented job or in quality control, you may encounter noisy, dusty or wet conditions.

### How Much Will You Earn? <sup>1</sup>

With so many options, the range in salary varies, but here are some average figures:

Technologist:	\$66,500/yr
Technician:	\$62,000/yr

### How Does the Future Look?

You will find most employment opportunities in large cities and towns working in research and development, quality assurance, inspection or management companies.

The employment outlook for this industry looks good far into the future. Related careers include quality control technician and industrial technologist, which may require additional education or training.

### How Can You Get Started?

In high school, be sure to take courses in English, mathematics, chemistry, biology and physics, as well as computer courses.

*Post secondary options are listed on the reverse side...*

TechWORKS! on the web...

[techworks.asttbc.org](http://techworks.asttbc.org)

turn over for more info!

## BIOLOGICAL SCIENCES TECHNOLOGY

### What Will You Need?

To become a biological science technologist or technician, you need to pursue a program of studies in biological sciences. Learning to collect, analyze and interpret data will be an important part of your studies. You will also learn to perform tests and experimental procedures.

Continuing with our example of a job at an environmental consulting company, some of the courses of study would be environmental physics, environmental emergency planning and response, air monitoring and pollution control.

### Post Secondary Possibilities

COLLEGE	PROGRAM	ACCREDITED STATUS	DISCIPLINE
BCIT	Biological Sciences	Technologist	Bio-Science
Camosun College	Chemical & Bio-Sciences	Recognized	Bio-Science/Chemical
Okanagan University College	Water Quality	Recognized	Bio-Science/Chemical

- Programs listed are those accredited by the Applied Science Technologists & Technicians of British Columbia (ASTTBC); check [www.asttbc.org](http://www.asttbc.org) for updates on accredited programs.
  - Check with your career facilitator or counsellor for other sources of information applicable to education options for this technology.
- <sup>1</sup> Salary figures indicated in the 'How Much Will You Earn?' section are extracted from ASTTBC's Member Compensation Survey or other Canadian sources applicable to the specific technology discipline. These figures are **representative only**; actual figures will vary depending on academic training, practical experience, job responsibilities and location of employment.
- The TechWORKS! web site is an important online resource and provides links to career information that will be of interest to students pursuing a career in technology.

#### SPONSORS

LEAD AGENCY

Applied Science Technologists & Technicians of British Columbia

AST technology professionals™

IN PARTNERSHIP WITH...

Industry Training and Apprenticeship Commission

PROFESSIONAL ENGINEERS AND TECHNICIANS OF BC

BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

BRITISH COLUMBIA

Information, Science and Technology Agency  
Ministry of Advanced Education, Training and Technology  
Ministry of Education

FEAT Foundation for Education & Reinforcement in Technology

Science Council of British Columbia

MISTIC

Human Resources Development Canada / Développement des ressources humaines Canada

BC Hydro

BC Biotech

innovation RESOURCE CENTRE