

## PROGRAM DESCRIPTION

- Biotechnology uses the products and processes of living organisms to improve quality of life. Applications include gene therapies to treat genetic disorders; more effective medicines tailored to individuals; vaccines to prevent disease; environmental decontamination to restore polluted spaces; genetic engineering of crops and livestock to improve their yield and nutrition... even making cheese and beer
- Hands-on learning combines classroom theory and practical, lab-based instruction
- Students gain experience with a wide variety of instrumentation, with instruction in genetics, microbiology, fermentation and forensics
- The fundamentals of genetic analyses and genetic engineering allow students to apply the same techniques used to engineer GMOs, extract and amplify DNA, and analyze genetic differences using DNA profiling
- The third year focuses on intensive, laboratory-based instruction and project-based learning in molecular biology, microbiology, analytical instrumentation, tissue culture and cutting-edge extraction technologies
- Overlapping areas of study provide the option to fast-track your way to a second diploma in Chemical Engineering or Environmental Technology

## APPROXIMATE COSTS (2013-2014)

Domestic Tuition/Ancillary Fees: \$3,659 (two semesters)

Consumables Fee: \$105 (Year One)

Books and Supplies: \$1,040

Additional costs, such as travel and parking, may be incurred during placements

## ADMISSION REQUIREMENTS

### Required Academic Preparation

- OSSD/OSSGD or equivalent with courses at the general or advanced, (C), (U) or (M) level, and
  - Grade 12 English (C) level or equivalent
- OR
- Mature applicant (see [loyalistcollege.com](http://loyalistcollege.com))

### Recommended Academic Preparation

- Grade 12 Mathematics, Chemistry, and Physics at the (C), (U) or general level
- Applicants with a related degree or diploma may be considered for advanced standing or direct entry into Year Two

## DIPLOMA TO DEGREE OPTIONS

Earn credit recognition at these institutions, or contact your university of choice to make individual arrangements. New agreements are added annually; visit [loyalistcollege.com](http://loyalistcollege.com) for the latest details.

### Two or Three-Year Diploma

Algoma University College  
Athabasca University  
Carleton University - Bachelor of Science (Honours)  
Davenport University  
Griffith University  
Guelph University - Bachelor of Science  
Laurentian University  
Royal Roads University - Bachelor of Science  
University of Ontario Institute of Technology

### Three-Year Diploma

Trent University - Bachelor of Science (Honours)

# LOYALIST

## LOYALIST COLLEGE

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# BIOT

## BIOTECHNOLOGY TECHNICIAN/TECHNOLOGY



# BIOTECHNOLOGY TECHNICIAN/TECHNOLOGIST



**Contact:** [biot@loyalist.on.ca](mailto:biot@loyalist.on.ca)

## PROGRAM LENGTH

Two-Year Ontario College Diploma (Technician)

Three-Year Ontario College Advanced Diploma (Technologist)

## HIGHLIGHTS

- Biotechnology plays a critical role in the battles against hunger, disease and pollution
- You'll love studying in Loyalist's state-of-the-art Instrumentation and Molecular Biology Labs, equipped with PCR and DNA sequencing technology
- Get on-the-job, practical experience during field placements in Years Two and Three
- Choose a career where you can make a difference

## CAREER OPPORTUNITIES

- A career in biotechnology holds many opportunities to make an impact in government, industry, education and medical facilities
- There is a growing demand for skilled technicians, lab technologists and research assistants to work in life sciences, agriculture, food production, pharmaceuticals, sanitation, and health research
- Graduates also find opportunities in regulation and enforcement, quality control, and sales



## OUR GRADS GET GREAT JOBS

Santa Maria Foods – Quality Control Analyst  
Royal Military College  
– Research and Development  
Bioniche Life Sciences Inc.  
– Biopharmaceutical Production Assistant  
Ottawa Hospital Research Institute  
– Health Researcher  
Huntsville Wine and Beer  
– Brewmaster/Biotechnician

**Percentage of grads working:\* 100%**

\*2011-12 academic year. Source: KPI Survey 2012 (Forum Research Inc. for Ministry of Training, Colleges and Universities)

