



# Forensic Biotechnology



## Why study forensic biotechnology?

Forensic biotechnology is an exciting area of medical science with constant developments being made through ground breaking discoveries.

The expansion of the biotechnology field worldwide has created an increase in the demand for highly trained personnel. Technical expertise in forensics and biotechnology is applicable around the world and opens the door to work opportunities in a diversity of industries.

## Career opportunities

Graduates of CSU's Bachelor of Science (Forensic Biotechnology) will be able to apply their broad range of skills to the forensic, biotechnology and related medical fields. Career opportunities exist in fields such as:

- biomedical research and the pharmaceutical sector (new generation therapeutics) as research scientists
- genetic screening in customs and quarantine laboratories (DNA fingerprinting)
- forensic science, microbiology research and service laboratories
- specialised disciplines in medical or veterinary diagnostic and service laboratories as scientific officers.

Technical expertise in biotechnology is applicable around the world in a diversity of industries. Graduates will readily adapt their expertise to areas including biomining, plant industries (crop production, horticulture), marine biology, paleontology, ecology (biodiversity analysis), as well as environmental pollution control and waste management, where their skills are increasingly in demand.

## What is CSU's Bachelor of Science (Forensic Biotechnology)?

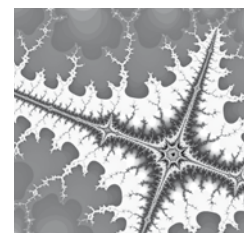
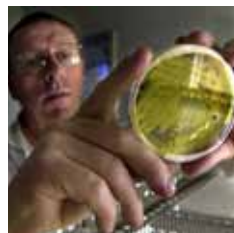
CSU's Bachelor of Science (Forensic Biotechnology) has been designed for graduates of Ontario College Diplomas in Health Biotechnology Technician and Biotechnology Technician, or students with equivalent qualifications. Prior to beginning the full program, Biotechnology Technician graduates will need to complete a bridging program, which provides required knowledge in physiological and forensic sciences not covered in the biotechnician program.

The program has been developed in conjunction with industry bodies to address the rapid technological changes and growth in the biotechnology and forensic industries worldwide. The program provides graduates with skills and knowledge relevant to these fields now and into the future.

Students can study the program for two years full-time on CSU's Ontario Campus or approximately four years part-time by distance education.

## Reasons for studying forensic biotechnology at CSU

- graduates' expertise will be applicable worldwide in a diversity of industries
- the program allows Ontario College graduates to upgrade to a university Honours degree
- credit is awarded for relevant courses already completed at college
- flexible study options allow you to study on campus or by distance education with the option of completing part of the program on one of CSUs Australian campuses



## What will I learn?

The program offers a solid base in the four key areas of biotechnology: molecular biology, biochemistry, immunology and microbiology. This is combined with a strong grounding of biotechnology applications to forensic science including legal and crime scene applications. Theoretical studies will be complemented with extensive practical work, case studies, seminars and report writing.

Graduates will be equipped with a sound understanding of recent trends and applications of technology in the biotechnology and forensic industries with special emphasis on DNA technology, bioinformatics and genomics.

## How will I learn?

Full-time students complete the theoretical component on CSU's Ontario Campus in Burlington while the practical component is completed at Mohawk College and McMaster University, utilising their modern laboratories.

Students studying by distance education can complete their studies at home or in their workplace but may have to attend on campus practical sessions each session.

All students must complete a six-week compulsory professional training component. Professional training can be carried out in blocks of three weeks if desired, preferably in the last 20 months of the course. Training locations can range from private companies to public research institutes and utilities such as hospitals, medical institutes and forensic laboratories. There is also the opportunity to undertake practical experience overseas. Students who can prove at least six to eight months of previous employment in an approved discipline are exempt from this component.

CSU places high importance on producing graduates who have skills that are applicable worldwide. As a student of CSU's Bachelor of Science (Forensic Biotechnology), you will be actively working with other students enrolled in this program around the world and have the option of undertaking part of the program in Australia.

## Distance education

Study by distance education allows you to choose where and when you complete your studies. CSU provides excellent support for distance education students with course materials designed to engage and promote active thinking and participation in an online learning environment in which you will interact with lecturers and students from around the world.

Some courses require students to attend on campus practical sessions. Using the laboratories at Mohawk College and McMaster University, these sessions provide you with the opportunity to immerse yourself in the area of study for an intensive period of up to eight days as well as share learning experiences face-to-face with other students and your lecturers.

## Further study

Graduates of CSU's Bachelor of Science (Forensic Biotechnology) have the opportunity to undertake further study and research at Master and PhD level at CSU in areas such as microbiology, molecular biology, applied immunology and antimicrobials.

This program is offered under the written consent of the Minister of Training, Colleges and Universities for the period from 17 June 2010 to 17 June 2015. Prospective students are responsible for satisfying themselves that the program and the degree will be appropriate to their needs (e.g. acceptable to potential employers, professional licensing bodies or other educational institutions).

[www.charlessturt.ca](http://www.charlessturt.ca)

**For more information about courses and how to apply, please contact the University:**

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Fax: 905 333 6562

Email: [wwss@cogeco.ca](mailto:wwss@cogeco.ca)

Web inquiry: [www.csu.edu.au/study/inquiry/ontario/prospective-students](http://www.csu.edu.au/study/inquiry/ontario/prospective-students)



Stewart Hall

## Australian Forensic biotechnology student

"CSU's forensic biotechnology program combines the essence of biomedical sciences with an application in a legal context, ensuring that when I complete my studies, I can apply for work both in the medical/research field as well as within non-policing forensic work as either a crime scene technician or in diagnostics.

"I have learnt to communicate scientifically and professionally. My lecturers have supported me and led me in the right direction to pursue a career path in research.

"Studying forensic biotechnology at CSU is definitely preparing me for the workforce. All my classes teach me the practical skills and the most up-to-date techniques currently employed such as crime scene management and DNA extraction.

"I have organised to do a two-week clinical placement in Korea, which will be primarily immunology-based research. CSU has even helped me look at doing a year's exchange in Canada for a forensics-based research project.

"This course is certainly one of the best, and I have been told so by crime scene technicians and forensic biologists in the industry as well."



**CHARLES STURT**  
UNIVERSITY