FORENSIC BIOLOGY (HBSc)

Department of Forensic Science

Forensic Science is the study of physical evidence in a modern legal context. It is best defined as “science in service to the courts.” Forensic Biology is the study of forensics and molecular biology.

UTM’s Forensic Science program, the first of its kind in Canada, is designed to provide the student with an understanding of scientific analyses, theories, laboratory skills, applications, and field techniques — while allowing the student to emphasize one particular area in greater detail. We have developed well-established partnerships with organizations such as the Centre of Forensic Sciences, the Office of the Chief Coroner for the Province of Ontario, the Ontario Provincial Police, the RCMP, and numerous other police services and agencies worldwide.

MAKE THE MOST OF YOUR TIME AT UTM!

We want to help you maximize your university experience, so we’ve pulled together information and interesting suggestions to get you started. As you review the chart on the inside pages, note that many of the suggestions need not be restricted to the year they are mentioned. In fact, activities such as joining an academic society, engaging with faculty and seeking opportunities to gain experience should occur in each year of your study at UTM. Read through the chart and create your own plan using My Program Plan found at www.utm.utoronto.ca/program-plans

Programs of Study (POSt)

- Specialist Program ERSPE1410, Forensic Biology (Science)
- Major Program ERMAJ0205 Forensic Science (Science)
- Minor Program ERMIN0205 Forensic Science

Check out...

How is biological evidence interpreted in the forensic context? Take FSC315H5 to learn about biological and instrumental techniques used for the analysis of evidentiary items, including DNA, bodily fluids and hair.

What can I do with my degree?

The career you choose will depend on your experience and interests. Visit the Career Centre to explore your career options.

Careers for Graduates: Forensic laboratory analyst; Coroner; Biological technician; Forensics scientist; Toxicologist; Bacteriologist; Criminologist; Ballistics analyst; Crime scene investigator; Medico-legal investigator; Image enhancement specialist.

Workplaces: Government; Forensic laboratories; Medical examiners/coroner offices; Toxicology laboratories; Police departments; Scientific R&D companies; Pharmaceutical companies.
**FORENSIC BIOLOGY SPECIALIST Program Plan**

**1ST YEAR**
- Enroll in courses BIO150H5, 153H5, CHM110H5, 120H5, FSC239Y5, MAT134Y5, 135Y5, 137Y5, PHY134H5 and 137H5.
- Choose a program of study (Subject POS) once you complete 4.0 credits. Use the Degree Explorer Planner and the Academic Calendar to plan your degree.
- Start sitting and get informed with utmONE and LAUNCH through the Office of Student Transition. Join a RGASC Peer Facilitated Study Group.

**PLAN YOUR ACADEMICS**

**2ND YEAR**
- Enroll in courses BIO202H5, 206H5, 207H5, 210Y5, FSC316H5, CHM242H5, 243H5, and FSC271H5.
- Consider applying for Research Opportunity Program (ROP) courses BIO299Y, FSC299Y and BIO399Y. Visit the EED website for ROP Course Prerequisites. Attend the RGASC’s P.A.R.T. to enhance your research skills.

**BUILD SKILLS**

**3RD YEAR**
- Enroll in courses (STA215H5, BIO360H5), FSC300H5, 302H5, 315H5 and 360H5.
- Throughout your undergraduate degree:
  - use the Degree Explorer to ensure you complete your degree and program requirements.
  - see the Office of the Registrar and the Forensic Science Academic Advisor.
- Explore your interests. Why not pass on your passion for science? Be a UTM Let's Talk Science Outreach volunteer to support educators and help youth form positive attitudes towards the role that STEM plays in their lives and futures.

**BUILD A NETWORK**

**4TH OR FINAL YEAR**
- Enroll in FSC401H5, 405H5 and 481Y5. Attain 1.5 BIO credits at the 300/400 level.
- Conduct a research project under the supervision of a faculty member through BIO481Y5. Speak to the Biology Undergraduate Advisor for advice and details.
- Log on to ACORN and request graduation.
- Learn techniques forensic scientists use in the field! Collect, process, and analyze evidence found at a "crime scene" through FSC407H5. Speak to the Forensic Science Academic Advisor.
- Apply to the Ontario Ministry of Natural Resources Internship Program as a recent graduate. View the MNRF website for details.

**BUILD A GLOBAL MINDSET**

- Attend events held by the International Education Centre (IEC) to explore different cultures through food, music, and sport or through sight-seeing around the GTA.
- Networking simply means talking to people and developing relationships with them. Start by joining the UTM Forensics Society (IVNVI). Find them on Facebook and follow them @utmforensics on Twitter. Go to IVNVI’s workshop offered by the Office of the Registrar and the Forensic Science Academic Advisor.

**PLAN FOR YOUR FUTURE**

- Attend the Program Selection & Career Options workshop offered by the Office of the Registrar and the CC.
- Check out Careers by Major at the CC to see potential career options.
- Attend the Meet the Prof Night.
- Attend the UTM Forensics Society (IVNVI) and the UTM Let's Talk Science Outreach.
- Attend events held by the International Education Centre (IEC) to explore different cultures through food, music, and sport or through sight-seeing around the GTA.
- Attend the Biology Seminar Series: weekly departmental seminars featuring exciting guest speakers from across North America.
- Earn credits overseas! Study for a summer, term or year at one of 120 universities. The Forensic Science department has identified 4 partners who are most relevant to their students. Speak to the IEC for details about Course Based Exchange and funding.

**HOW TO USE THIS PROGRAM PLAN**
- Read through each year. Investigate what appeals to you here and in any other Program Plans that apply to you.
- Visit www.utm.utoronto.ca/program-plans to create your own plan using My Program Plan.
- Update your plan yearly.

**UTM Let's Talk Science Outreach**
- Volunteer to support UTM Let's Talk Science Outreach.
- Attend the UTM Let's Talk Science Outreach weekly seminars featuring exciting guest speakers from across North America.
- Earn credits overseas! Study for a summer, term or year at one of 120 universities. The Forensic Science department has identified 4 partners who are most relevant to their students. Speak to the IEC for details about Course Based Exchange and funding.

**Establish a professional presence on social media (e.g., LinkedIn).**
- Attend the Biology Seminar Series: weekly departmental seminars featuring exciting guest speakers from across North America.
- Earn credits overseas! Study for a summer, term or year at one of 120 universities. The Forensic Science department has identified 4 partners who are most relevant to their students. Speak to the IEC for details about Course Based Exchange and funding.

**Market your skills to employers. Get your resume critiqued at the CC. Attend the CC workshop: Now That I’m Graduating What’s Next?**
- Write a strong application for further education. Attend the CC’s Mastering the Personal Statement workshop.
Skills developed in Forensic Biology

To be competitive in the job market, it is essential that you can explain your skills to an employer. Visit the Career Centre to learn how to articulate and market the following skills:

**Technical**: make and record accurate measurements; make observations, draw diagrams and take photographs; crime scene investigation; and use statistical tests.

**Communication**: report writing; verbal testimony; understanding of cultural diversity; translate scientific evidence; and analyze and present data.

**Organizational**: casework; teamwork; and understanding legal issues related to evidence.

**Problem-solving**: identify alternative solutions and interpret lab findings.

**Research**: draw conclusions based on the evidence obtained and communicate results of investigative work through proper channels based on the conclusions drawn.

Get involved

Check out student organizations on campus. Here are a few:

- UTM Forensics Society (IVNVI)
- Erindale Biology Society (EBS)
- UTM Student Union (UTMSU)
- UTM Athletics Council (UTMAC)

For a listing of clubs on campus visit www.utm.utoronto.ca/clubs.

Services that support you

- AccessAbility Services (AS)
- Career Centre (CC)
- Centre for Student Engagement (CSE)
- Experiential Education Office (EEO)
- Health & Counselling Centre (HCC)
- Indigenous Centre (IC)
- International Education Centre (IEC)
- Office of Student Transition (OST)
- Office of the Registrar (OR)
- Recreation, Athletics and Wellness Centre (RAWC)
- Robert Gillespie Academic Skills Centre (RGASC)
- UTM Library, Hazel McCallion Academic Learning Centre (HMALC)

Department of Forensic Science

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FUTURE STUDENTS

Admission to UTM

All program areas require an Ontario Secondary School Diploma, or equivalent, with six Grade 12 U/M courses, or equivalent, including English. The admission average is calculated with English plus the next best five courses. The Grade 12 prerequisites for this program are Advanced Functions, Biology, Chemistry and Physics. The approximate average required for admission is mid- to high-70s. More information is available at utm.utoronto.ca/viewbook.

**NOTE**: During the application process, applicants will select the Forensic Science admissions category but will not officially be admitted to a formal program of study (Specialist, Major, and/or Minor) until after first year.

Sneak Peek

Interested in the design of the human body? Learn the fundamentals of human anatomy and physiology in BIO210Y5. What is the role of a coroner? Take FSC239Y to find out about crime scene investigation, forensic botany and forensic entomology. Get excited for FSC481Y5! You will spend at least 200 hours at a forensic agency collaborating with a professional forensic specialist on an original project.

Our courses provide students the opportunity to learn about all aspects of forensic science in the classroom and to apply their knowledge to practical assignments using state-of-the-art technology and instruments. Courses are taught by professionals who bring their own expertise and unique field experience to the classroom.

Student Recruitment & Admissions

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905-828-5400
www.utm.utoronto.ca/future-students