Forensic Biology (HBSc)

**Forensic Science Program**

**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, although there are many more! 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](http://www.utm.utoronto.ca/program-plans)

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**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; Crime scene technician; Biological technician; Forensics scientist; Bacteriologist; Criminologist; Crime scene investigator; Medico-legal investigator; Pathology technician.

**Workplaces**: Biology labs; Government; Forensic laboratories; Medical examiners/coroner offices; Scientific R&D companies; Pharmaceutical companies; Police agencies.
**ACADEMICS**

**1ST YEAR**
- Enrol in BIO152H5, 153H5; CHM110H5, 120H5; FSC238H5; MAT136H5, 137H5, 138H5, 139H5; PHY136H5, 137H5.
- Choose a program of study (Subject POS) once you complete 4.0 credits. Use the Degree Explorer and the Academic Calendar to plan your degree.
- Develop foundational academic skills and strategies by enrolling in a student-focused course, build community and gain academic support through LAUNCH. Join a RGASC Peer Facilitated Study Group.
- Attend the Co-Curricular Record (CCR). Search for opportunities beyond the classroom, and keep track of your accomplishments.
- Develop your global mindset! Attend the International Education Centre (IEC) events held by the International Education Centre.
- Attend events held by the International Education Centre (IEC), whether you are an international or domestic student. Explore your culture and other cultures through weekly/regular conversations, Language Conversation Circles, debates, and activities to enhance your global and intercultural mindset.
- 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 UTM Forensics Outreach Program webpage for details.
- Attend the Get Experience Fair through the Centre for Career (CC) to learn about on- and off-campus opportunities.
- Attend the International Education Centre (IEC) events held by the International Education Centre.
- Attend the Experiential Education Unit Student Ambassador and earn a CCR notation.
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- 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.
- Explore careers through the CC’s Job Shadowing Program.
- Consider joining the Forensic Science Outreach Program. Be a Forensic Science Outreach (CC) to learn about on- and off-campus work and volunteer opportunities.
- Prepare for admission tests (LSAT, MCAT), and research funding options (OGS, SSHRC). Prepare for admission tests (LSAT, MCAT), and research funding options (OGS, SSHRC).

**2ND YEAR**
- Enrol in courses BIO206H5, 207H5, (208H5, 209H5); FSC316H5, CHM242H5, 243H5, FSC271H5, STA212H5.
- Consider applying for Research Opportunity Program (ROP) courses BIO399Y, FSC399Y and BIO399Y. Visit the EEU website for ROP Course Prerequisites. Attend the RGASC’s Peer Facilitated Study Group.
- Use the Career Learning Network (CLNxs). View position descriptions on the CLNxs.
- Sign up to become an Experiential Education Unit Student Ambassador and earn a CCR notation.
- Enrol in courses BIO362H5; CHM361H5; (FSC300H5,302H5)/ (210H5,303H5), 315H5, 330H5, 340H5, 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.

**3RD YEAR**
- Enrol in courses BIO362H5; CHM361H5; (FSC300H5,302H5)/ (210H5,303H5), 315H5, 330H5, 340H5, 360H5.
- Consider further education? Attend the CC’s Further Education Showcase. Talk to professors – they are potential mentors and references.
- Earn credits overseas! Apply to study for a summer, term or year at one of 140+ universities. The Forensic Science department has identified partners which are most relevant to our students. Speak to the EEU for details on on- and off-campus opportunities.
- Learn techniques forensic scientists use in the field! Collect, process, and analyze evidence found at a “crime scene” through FSC407H5. Attend the Forensic Science Academic Advisor.
- Prepare for admission tests (LSAT, MCAT), and research funding options (OGS, SSHRC). Prepare for admission tests (LSAT, MCAT), and research funding options (OGS, SSHRC).
- What’s your next step after undergrad?
- Market your skills to employers. Get your resume critiqued at the CC. Attend the CC workshop. Next? Attend the CC’s Mastering the Personal Statement workshop.

**4TH OR FINAL YEAR**
- Choose how you would like to apply your skills: conduct an individual internship research project under the supervision of a professional mentor through FSC481Y5.
- Prepare for admission tests (LSAT, MCAT), and research funding options (OGS, SSHRC).
- Learn techniques forensic scientists use in the field! Collect, process, and analyze evidence found at a “crime scene” through FSC407H5. Attend the Forensic Science Academic Advisor.
- Prepare for admission tests (LSAT, MCAT), and research funding options (OGS, SSHRC).
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- Learn about working abroad. Read up on worldwide employment trends and industry outlooks through GoinGlobal. Attend the Go Global Expo to learn about opportunities. See if you are eligible for International Experience Canada.
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**BUILD SKILLS**
- Do you have a professor you really like or connect with? Ask them a question during office hours. Discuss an assignment. Go over lecture material. Don’t be shy! Learn Tips On How to Approach a Professor available through the Experiential Education Unit (EEU).
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- **BUILD NETWORK**
- Visit the UTM Library Reference Desk.
- **BUILD A GLOBAL MINDSET**
- Engage in programs like the Global and Intercultural Fluency Training Series (GIFTS) or learn about and prepare for a future UTM Abroad Experience through the IEC to strengthen and enhance your intercultural skill set, and learn about other cultures while sharing your own!
- **PLAN YOUR ACADEMICS**
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- **PLAN FOR YOUR FUTURE**
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**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](http://www.utm.utoronto.ca/program-plans) to create your own plan using My Program Plan. Update your plan yearly.

**Visit** [www.utm.utoronto.ca/program-plans](http://www.utm.utoronto.ca/program-plans) for the online version and links.
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**: DNA and genomic sequencing; 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 the 100+ 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](http://www.utm.utoronto.ca/clubs).

Services that support you

- Accessibility Services (AS)
- Career Centre (CC)
- Centre for Student Engagement (CSE)
- Experiential Education Unit (EEU)
- Health & Counselling Centre (HCC)
- Indigenous Centre (IC)
- International Education Centre (IEC)
- 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)

Forensic Science Program

Terrence Donnelly Health Sciences Complex, 4th Floor
University of Toronto Mississauga
3359 Mississauga Rd
Mississauga ON Canada L5L 1C6
416-705-5876
[www.utm.utoronto.ca/forensic](http://www.utm.utoronto.ca/forensic)

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](http://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

Innovation Complex, Room 1270
University of Toronto Mississauga
3359 Mississauga Rd
Mississauga ON Canada L5L 1C6
905-828-5400
[www.utm.utoronto.ca/future-students](http://www.utm.utoronto.ca/future-students)