FORENSIC CHEMISTRY (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.” 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

Programs of Study (POSt)

- Specialist Program ERSPE1009 Forensic Chemistry (Science)
- Major Program ERMAJ0205 Forensic Science (Science)
- Minor Program ERMIN0205 Forensic Science

Check out...

How is analytical chemistry used for the analysis of physical evidence? Take FSC311H5 to learn about chemical and instrumental techniques used for analysis of drugs and alcohol, gunshot residue, explosives and paint.

What can I do with my degree?

Careers for Graduates: Forensic laboratory analyst; Hazardous waste management technologist; Criminologist; Quality controller; Biochemistry technologist; Coroner; Medical lab technologist; Toxicologist; Ballistics analyst; Regulatory / government affairs specialist; Medico-legal investigator.

Workplaces: Government; Forensic laboratories; Medical examiners/coroner offices; Toxicology laboratories; Police agencies; Pharmaceutical companies; Scientific R&D companies.
# FORENSIC CHEMISTRY

## SPECIALIST Program Plan

### 1ST YEAR

- **Enrol in courses**: CHM110H5, 120H5; BIO152H5, FSC239Y5, MAT134Y5/135Y5/137Y5/157Y5; PHY136H5 and 137H5.
- Choose a program of study (Subject POSI) once you complete 4.0 credits. Use the Degree Explorer Planner and the Academic Calendar to plan your degree.
- Start strong and get informed with uTmisc and LAUNCH through the Centre for Student Engagement (CSE). Join a UTM Forensics Society (IVNVI) and follow them @utmforensics on Twitter. Go to IVNVI’s Experiential Education Unit (EEU). Attend the Career Centre (CC) to learn about on- and off-campus opportunities.
- Visit the UTM Library Reference Desk.
- 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 on Twitter.
- Attend events held by the International Education Centre (IEC), whether you are an international or domestic student. Explore different cultures through food, music, and sport or through sight-seeing around the GTA.
- Update your plan yearly. Please see the online version and links at www.utm.utoronto.ca/program-plans for assistance. **My Program Plan** Update your plan yearly.

### 2ND YEAR

- **Enrol in courses**: BIO200H5, 206H5; 207H5; CHM211H5; JCP221H5, CHM231H5, 242H5, 243H5; FSC271H5; and STA220H5.
- Consider applying for Research Opportunity Program (ROP) courses CHM399Y5, FSC399Y1 and CHM999Y5. Visit the EEU website for ROP Course Prerequisites. Attend the RGASC’s P.A.R.T. to enhance your research 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).
- Explore careers through the CC’s Experiential Education Unit (EEU) workshop offered by the Office of the Registrar and the Forensic Science Academic Advisor. Consider applying for Research Opportunity Program (ROP) courses CHM399Y5, FSC399Y1 and CHM999Y5. Attend the EEU website for ROP Course Prerequisites. Attend the RGASC’s P.A.R.T. to enhance your research skills.
- Explore careers through the CC’s Experiential Education Unit (EEU) workshop offered by the Office of the Registrar and the Forensic Science Academic Advisor. Consider applying for Research Opportunity Program (ROP) courses CHM399Y5, FSC399Y1 and CHM999Y5. Attend the EEU website for ROP Course Prerequisites. Attend the RGASC’s P.A.R.T. to enhance your research skills.
- 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.

### 3RD YEAR

- 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 for assistance.
- Attend the International Education Centre (IEC) to learn about opportunities beyond the classroom, and keep track of your accomplishments.
- Embark on a UTM Abroad Global Impact Project through the IEC. Take advantage of this opportunity to travel with a faculty member and learn about a topic of interest in a unique location.
- Embark on a UTM Abroad Global Impact Project through the IEC. Take advantage of this opportunity to travel with a faculty member and learn about a topic of interest in a unique location.
- Interested in deepening your global perspective? Register for the Global Citizenship Certificate offered by the IEC. 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.

### 4TH OR FINAL YEAR

- **Enrol in courses**: CHM414H5; 416H5; FSC402H5 and 481Y5 (with chemistry focus). Conduct an internship research project under the supervision of a professional mentor and faculty member through FSC4B1Y5.
- Log on to ACORN and request graduation.
- Skills are transferable to any job regardless of where you develop them. 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.
- 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.
- Consider applying for Research Opportunity Program (ROP) courses CHM399Y5, FSC399Y1 and CHM999Y5. Attend the EEU website for ROP Course Prerequisites. Attend the RGASC’s P.A.R.T. to enhance your research skills.
- Establish a professional presence on social media (e.g., LinkedIn). Attend the E.A. Robinson Science Education Lectureship through the CPS department. Thinking about life after UTM? Connect with a UTM alumnus through the CSE’s Alumni Mentorship Program!
- Attend the International Education Centre (IEC) to learn about opportunities. See if you are eligible for International Experience Canada.
- 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.

### 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.

---

*Consult the Academic Calendar for greater detail on course requirements, program notes and degree requirements.*

Visit www.utm.utoronto.ca/program-plans for the online version and links. Revised on: 9/18/2018
Skills developed in Forensic Chemistry

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**: toxicology methods; chemical processing; 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 Chemical and Physical Sciences Society (ECPS)
- 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)

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

Curious about pharmacology? Take BIO200H5 to learn about the absorption and calculation of dosages as well as the variability in drug response and adverse drug reactions. What is the role of a coroner? Enrol in FSC239Y to find out about crime scene investigation, forensic chemistry and toxicology. Get excited for FSC481Y5! You’ll spend 200 hours 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)