



UNIVERSITY OF
TORONTO
MISSISSAUGA

FORENSIC SCIENCE PROGRAM



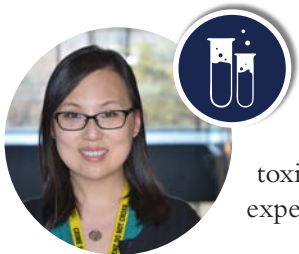
utm.utoronto.ca/forensic

WHY CHOOSE UTM FOR FORENSIC SCIENCE?

Our courses are taught by forensic and criminal science professionals who bring their own expertise and unique field experience to the classroom. Our faculty consists of highly trained individuals including:



Dr. Tracy Rogers, Forensic Anthropology, is best known for her work as the lead forensic anthropologist at Canada's largest crime scene, the Pickton pig farm investigation, as well as several other high profile investigations in which her students were given opportunities to contribute. Dr. Rogers is also a forensic consultant for the Ontario Forensic Pathology Service, and the Office of the Chief Coroner of Ontario.



Dr. Vivienne Luk, Forensic Chemistry, came to UTM from the Centre of Forensic Sciences in Toronto, where she worked as a Forensic Toxicologist. She analyzed biological samples for the presence of drugs, alcohol and poisons and interpreted toxicological findings for the purposes of medical and legal investigations, with court experience as an expert witness in impaired driving cases, homicides and sexual assaults.



Dr. Nicole Novroski, Forensic Biology, comes to UTM from the Center for Human Identification at the University of North Texas Health Science Center in Fort Worth, Texas, where she completed her doctoral studies in the Research and Development Laboratory of Dr. Bruce Budowle. Dr. Novroski's research focused on identifying novel short tandem repeat markers for enhanced DNA mixture deconvolution.



Dr. Karen Woodall, Forensic Toxicology, comes to UTM from the Centre of Forensic Sciences in Toronto, as a forensic toxicologist, teaching the forensic toxicology and professionalism courses. Her current research topics include deaths due to fentanyl abuse and the role of drugs in motor vehicle fatalities. She also regularly provides lectures and training to police officers in the role of forensic toxicology in various criminal investigations.



Dr. Rasmus Rosenberg Larsen, Forensic Psychology, holds a Ph.D. in philosophy from University at Buffalo, New York, focusing on mental health research, moral psychology, and biomedical ontology. His current project involves studies of the theoretical validity of clinical construct, and psychopathy as a mental disease. Rasmus can be found teaching topics regarding the psychology of violence and antisocial conduct as well as foundational philosophical and scientific issues in mental health research.



Prof. Wade Knaap, Forensic Identification, is a retired police officer from the Toronto Police Services, Forensic Identification Unit. He teaches the Forensic Identification field school, giving students proxy experience in crime scene investigation, as well as The Real CSI, which debunks common misconceptions portrayed in TV and the media.

EDUCATION THROUGH EXPERIENCE

The Forensic Anthropology Field School allows students to work in teams and to put themselves in the place of a forensic anthropologist where they learn to search and locate a "missing person" buried on campus. Students learn to map and record the scene, collecting evidence to reconstruct activity relating to the death and deposition of the victim.

The Forensic Identification Field School allows students to experience practical exposure to field and laboratory methods related to evidence recognition, collection, and interpretation. Students work in teams putting themselves in the place of a forensic identification specialist when they are called in to process the "crime scene" that has taken place in the [Forensic Crime Scene House](#) located on campus. Students must document, collect, process, and analyze the various types of evidence found at the scene.

Experiential Opportunities are guaranteed to all students enrolled in one of the Forensic Science Specialist programs. As Canada's first Honours BSc degree program in Forensic Science, UTM has developed well-established partnerships over the past twenty years 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. In their senior year, students may choose one of four experiential capstones to prepare them for their next step into the workplace, including mentor paired research, collaborative team research, advanced field opportunities, and more.

The Forensic Outreach Program gives our students a chance to engage with the wider community in meaningful ways during their time at UTM. Using the skills and techniques they learn in class, student volunteers [facilitate workshops and educational activities](#) for the public, high schoolers, teachers and adults interested in forensic science. This program gives undergraduate students a chance to practice their presentation and teaching skills in preparation for further academic and professional careers.



The UTM Forensics Society (IVNVI) is a strong support environment for undergraduate students. IVNVI is an active UTM society that offers workshops on academic skills, program application information sessions, firearms licensing, and organizes trips to Canadian and international forensic science conferences. For more information, visit: utmforensicsociety.wixsite.com/ivnvi



HOW DO I OBTAIN AN HONOURS BSc DEGREE IN FORENSIC SCIENCE?

Contributing to the completion of your Honours BSc Degree, you can choose from two Forensic Science Program options:

OPTION 1) THE FORENSIC SCIENCE MAJOR (ERMAJ0205)

This Major Program can only be completed as part of a [Double Major Honours BSc Degree](#), therefore, the Forensic Science Major requirements MUST be completed together with the second science major requirements (preapproved second science Majors are: Biology, Chemistry, Anthropology, Psychology).

9.0 credits are required to complete this program, including at least 2.0 at the 300/400 level. Please refer to the UTM calendar at: <https://utm.calendar.utoronto.ca/section/Forensic-Science> for complete listings of required courses needed for completion of the various approved 2nd science major programs listed below:

- Anthropology Major Program (ERMAJ0105)
- Biology Major Program (ERMAJ2364)
- Chemistry Major Program (ERMAJ1376)
- Psychology Major Program (ERMAJ1160)

OPTION 2) FORENSIC SCIENCE SPECIALIST PROGRAMS

In selecting a Specialist program type option, the program course requirements for ONE of the following Forensics Science Specialist Programs below needs to be completed. Please refer to the UTM calendar for full program requirements listed for each individual Forensic Science Specialist Program below: <https://utm.calendar.utoronto.ca/section/Forensic-Science>

- Anthropology Specialist Program (ERSPE1338)
- Biology Specialist Program (ERSPE1410)
- Chemistry Specialist Program (ERSPE1009)
- Psychology Specialist Program (ERSPE1505)

WHAT HIGH SCHOOL PREPARATION IS NEEDED?

Students need six Grade 12U/M courses including Grade 12U English. This refers to courses from the Ontario curriculum. We will accept equivalent courses from other academic systems. For more details, visit the Admissions website: <https://www.utm.utoronto.ca/future-students/admissions>

Include the following for [Forensic Anthropology Specialist](#):



- Grade 12 Biology (SBI4U)
- Grade 12 Advanced Functions (MHF4U)

Include the following for the [Forensic Psychology Specialist](#):



- Grade 12 Biology (SBI4U)
- Grade 12 Advanced Functions (MHF4U)

Include the following for [Forensic Biology Specialist](#); [Forensic Chemistry Specialist](#) and the [Forensic Science Double Major](#):



- Grade 12 Biology (SBI4U)
- Grade 12 Chemistry (SCH4U)
- Grade 12 Advanced Functions (MHF4U)



In addition to the above, Grade 12 [Calculus \(MCV4U\)](#) and [Physics \(SPH4U\)](#) is highly recommended for success in the chemistry and biology specialist.

WHAT COURSES ARE TAKEN IN FIRST YEAR UNIVERSITY?

FORENSIC SCIENCE (DOUBLE) MAJOR (ERMAJ0205)

In addition to the following 1st year courses required for the FSc Major Program, students must also complete the 1st year course requirements for the student's intended [Second Major Program](#) (see below).

- CHM110H5 Chemical Principles I
- CHM120H5 Chemical Principles II
- FSC239Y5 Introduction to Forensic Science
- One of: (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5)
- PHY136H5 Introductory Physics I

TO ADVANCE TO SECOND YEAR, STUDENTS MUST MEET THE FOLLOWING FIRST YEAR REQUIREMENTS

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of FSC239Y5 with a grade of 70% or better in their first attempt.
(subsequent attempts will count for credit only, not POS_t admission)
3. Completion of CHM110H5, CHM120H5 with 65% or better.
4. Completion of (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5).
5. Completion of PHY136H5.
6. A minimum Cumulative Grade Point Average of at least 2.7.
7. Enrolment in an Approved Second Major (see below).

SECOND MAJOR OPTIONS: 1ST YEAR REQUIRED COURSES

Students wanting [Anthropology \(BSc\)](#) as their Second Major should also include:

- ANT101H5** Intro to Biological Anthropology & Archaeology
- ANT102H5** Intro to Sociocultural & Linguistic Anthropology
- ISP100H5** Writing for University and Beyond

Students wanting [Biology](#) as their Second Major should also include:

- BIO152H5** Intro to Evolution & Evolutionary Genetics
- BIO153H5** Diversity of Organisms
- ISP100H5** Writing for University and Beyond

Students wanting [Chemistry](#) as their Second Major should also include:

- BIO152H5** Intro to Evolution and Evolutionary Genetics
- BIO153H5** Diversity of Organisms (recommended)
- ISP100H5** Writing for University and Beyond

Students wanting [Psychology](#) as their Second Major should also include:

- PSY100Y5** Introductory Psychology
- BIO152H5** Intro to Evolution & Evolutionary Genetics
- BIO153H5** Diversity of Organisms
- ISP100H5** Writing for University and Beyond

FORENSIC SCIENCE MINOR (ERMIN0205)

A minor program that can be taken in combination with [any other specialist or major program](#) including from the Social Sciences and Humanities. This program will complement degrees in criminology, sociology, geography, political science, and any other field that intersects with the legal system. Students will learn forensic theory and at least one applied skill set through lectures and labs.

- FSC239Y5 Introduction to Forensic Science. A final grade of 75% is required

At least 4.0 total credits from Forensic Science are required to graduate with this minor degree.

WHAT COURSES ARE TAKEN IN FIRST YEAR UNIVERSITY



FORENSIC ANTHROPOLOGY SPECIALIST PROGRAM (ERSPE1338)

- ANT101H5 Introduction to Biological Anthropology and Archaeology
- ANT102H5 Introduction to Sociocultural and Linguistic Anthropology
- BIO152H5 Introduction to Evolution and Evolutionary Genetics
- BIO153H5 Diversity of Organisms
- FSC239Y5 Introduction to Forensic Science
- Consider ISP100H5, which is required for the general Anthropology Major degree.

TO ADVANCE TO SECOND YEAR, STUDENTS MUST MEET THE FOLLOWING FIRST YEAR REQUIREMENTS

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of ANT101H5, ANT102H5 each with a grade of 75% or higher
3. Completion of BIO152H5, BIO153H5 each with a grade of 65% or higher
4. Completion of FSC239Y5 with a grade of 70% or better in their first attempt.
(subsequent attempts will count for credit only, not POST admission)
5. A minimum Cumulative Grade Point Average of at least 3.2
The actual minimum CGPA varies from year to year but is never lower than 3.2

At least 15.5 total credits are required to graduate from this program.



FORENSIC BIOLOGY SPECIALIST PROGRAM (ERSPE1410)

- BIO152H5 Introduction to Evolution and Evolutionary Genetics
- BIO153H5 Diversity of Organisms
- CHM110H5 Chemical Principles I
- CHM120H5 Chemical Principles II
- FSC239Y5 Introduction to Forensic Science
- (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5)
- PHY136H5: Introductory Physics I
- Consider ISP100H5, which is required for the general Biology Major degree.

TO ADVANCE TO SECOND YEAR, STUDENTS MUST MEET THE FOLLOWING FIRST YEAR REQUIREMENTS

1. Completion of 4.0 credits; including 3.0 science credits.
2. Completion of BIO152H5, BIO153H5 each with a grade of 75% or higher.
3. Completion of CHM110H5, CHM120H5 each with a grade of 65% or higher.
4. Completion of FSC239Y5 with a grade of 70% or better in their first attempt.
(subsequent attempts will count for credit only, not POST admission)
5. Completion of (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5).
6. Completion of PHY136H5.
7. A minimum Cumulative Grade Point Average of at least 3.2

The actual minimum CGPA requirement varies from year to year but is never lower than 3.2

At least 15.5 total credits are required to graduate from this program.

FOR FORENSIC SCIENCE SPECIALIST PROGRAMS?



FORENSIC CHEMISTRY SPECIALIST PROGRAM (ERSPE1009)

- BIO152H5 Introduction to Evolution and Evolutionary Genetics
- CHM110H5 Chemical Principles I
- CHM120H5 Chemical Principles II
- FSC239Y5 Introduction to Forensic Science
- (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5)
- PHY136H5: Introductory Physics I
- Consider ISP100H5, which is required for the general Chemistry Major degree.

TO ADVANCE TO SECOND YEAR, STUDENTS MUST MEET THE FOLLOWING FIRST YEAR REQUIREMENTS

1. Completion of 4.0 credits; including 3.0 science credits.
 2. Completion of CHM110H5, CHM120H5 each with a grade of 65% or higher.
 3. Completion of FSC239Y5 with a grade of 70% or better in their first attempt.
(subsequent attempts will count for credit only, not POST admission)
 4. Completion of (MAT132H5, MAT134H5) or (MAT135H5, MAT136H5).
 5. Completion of PHY136H5.
 6. A minimum Cumulative Grade Point Average of at least 3.2
- The actual minimum CGPA requirement varies from year to year but is never lower than 3.2

At least 16.5 total credits are required to graduate from this program.



FORENSIC PSYCHOLOGY SPECIALIST PROGRAM (ERSPE1505)

- PSY100Y5 Introductory Psychology
- BIO152H5 Introduction to Evolution and Evolutionary Genetics
- BIO153H5 Diversity of Organisms
- FSC239Y5 Introduction to Forensic Science
- Consider ISP100H5, which is required for the general Psychology Major degree.

TO ADVANCE TO SECOND YEAR, STUDENTS MUST MEET THE FOLLOWING FIRST YEAR REQUIREMENTS

1. Completion of 4.0 credits, including 3.0 science credits.
 2. Completion of PSY100Y5 with a grade of 75% or higher.
 3. Completion of BIO152H5, BIO153H5 with a grade of 65% or higher.
 4. Completion of FSC239Y5 with a grade of 70% or better in their first attempt.
(subsequent attempts will count for credit only, not POST admission)
 5. A minimum Cumulative Grade Point Average of at least 3.2
- The actual minimum CGPA requirement varies from year to year but is never lower than 3.2

At least 15.0 total credits are required to graduate from this program.



AFTER GRADUATION



Forensic Science 2024 graduates standing with Dr. Tracy Rogers (Associate Professor, Forensic Anthropology), Dr. Karen Woodall (Assistant Professor, Forensic Toxicology), and Det. Wade Knaap (Assistant Professor, Forensic Identification).

The Forensic Science Program prepares students for graduate programs in [Anthropology](#), [Biology](#), [Biotechnology](#), [Chemistry](#), [Molecular Biology](#), [Psychology](#), or [Toxicology](#). Alternatively, graduates may enter professional programs, subsequently establishing successful careers in medicine, law enforcement (either as civilians or sworn police officers), forensic laboratory science, forensic consulting, law, and a wide range of related fields.

For more information, visit the forensic science alumni webpage '[Where Are They Now?](#)' to get an idea of where our graduates are hired, what they are doing, and their achievements.

RECENT ALUMNI HIGHLIGHT utm.utoronto.ca/forensic/alumni



Thu Le, MScFSc. Candidate, HBSc. Specialty in Forensic Anthropology (2023)

Having completed her Specialist Degree in Forensic Anthropology, Thu is now currently a master's student at the University of Strathclyde in Glasgow, Scotland. As an indication of how closely linked the global community of forensic science is, she is completing her research in collaboration with UTM's own Dr. Woodall.

According to Thu: "One of the biggest pieces of advice I have for coming forensic science students is to network as early as possible. Building a network opens doors to valuable connections, mentorships, and opportunities. By engaging with peers, professors, and professionals in your field of interest, you not only gain insights into the industry but also establish a foundation for future collaborations and career advancements."

For more information on the program, courses, and the application process, visit utm.utoronto.ca/forensic