

FORENSIC SCIENCES

Department Website: <https://www.smu.ca/forensic-certificate/index.html>
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Department Email: forensics@smu.ca

Forensic Sciences refers to the application of scientific disciplines for the purposes of legal investigations, either criminal or civil in nature. With this broad definition, forensic scientists can be trained in many different fields, including:

- biology
- anthropology
- chemistry
- genetics
- toxicology
- psychology, etc.

In Canada, police forces are regularly involved in forensic investigations, but there are others, (e.g., medical personnel, dentists, biologists, criminologists and anthropologists), who are interested in, or can benefit from, training in forensic sciences.

The Certificate in Forensic Sciences is a recognition of the successful completion of a set of requirements, designed to expose students to selected facets of the application of science to the law. Progressing through the program as a cohort group, students learn directly from both research faculty and external field experts, to develop their awareness of the science underpinning physical evidence investigation. The Certificate program is an added distinction to the Bachelor degree with Major (or Honours), which is completed concurrently with the fulfillment of the requirements for the student's chosen major. It is not a stand-alone program.

The Certificate builds on a required first-year science foundation, and is comprised of an eighteen (18) credit-hour core in fundamental forensic sciences breadth, and an additional six (6) credit hours of selected program electives aligning with the student's particular major, and with their future goals in related practice or continued study.

Program Goals

The Certificate is intended to provide motivated undergraduate students focused opportunities to explore their expressed interest in the application of scientific concepts, methods of analysis, and critical evaluation, to forensic matters. The goal is to add special interest, applied study to a core discipline major in a way that can help to prepare students for post-graduate education in desired related fields. Critical thinking practice is at the core of the program with an inherent focus on the development of such intellectually disciplined processes of applying, analyzing, and evaluating information, results, and conclusions.

Program

Admission to the Certificate in Forensic Sciences is by approval of the Program Coordinator following review of student applications on an annual basis (normally in February of each year). Directions and deadlines for applications are available online on the Forensic Sciences webpage (<https://www.smu.ca/future-students/bsc-programs/certificates/certificateinforesciscience/>). Interested students should

commence their inquiry about the Certificate Program with a Science Advisor as soon as possible so that they are best prepared for admission.

Applicants must be current Saint Mary's University students with a declared major (or clearly-stated intended major, if admission to the particular major is not yet allowable). Applicants must have completed at least thirty (30) credit hours by the end of the winter semester in the year in which they are applying, with a minimum CGPA of 3.00, including the following admission pre-requisite courses:

Code	Title	Credit Hours
BIOL 1211	Molecular and Cell Biology	3
BIOL 1212	Organismal and Ecological Biology	3
BIOL 1213	Applications in Biology	3
CHEM 1210	General Chemistry I	3
One of the following:		3
CHEM 1211	General Chemistry II for Physical Sciences	
CHEM 1212	General Chemistry II for Life Sciences	
CHEM 1213	General Chemistry II for Engineering	

¹ BIOL 1201 may be substituted in lieu of BIOL 1211 and BIOL 1213

² BIOL 1202 may be substituted in lieu of BIOL 1212 and BIOL 1213.

Certificate in Forensic Sciences

The twenty-four (24) credit hours used to satisfy the requirements for the Certificate in Forensic Sciences are listed below. A minimum GPA of 3.00 must be achieved in the courses used to satisfy these twenty-four credit hours. Students must complete any prerequisites for these courses.

Code	Title	Credit Hours
Required Courses		
FRSC 2200	Basic Sciences for Forensics I	3
FRSC 2201	Basic Science for Forensics II	3
FRSC 3310	Role of Science in Forensics	3
FRSC 3350	Forensic Sciences in Practice	3
Select 12 credits of Science-Electives with at least six credits from FRSC in addition to those used to satisfy requirement above of the following:		12
FRSC 3007	Forensic DNA Typing	
FRSC 3400	Forensic Human Anatomy	
FRSC 4002	Wildlife Forensics	
FRSC 3800 - FRSC 3849	Special Topics in Forensic Science	
FRSC 3876 - FRSC 3899	Directed Studies in Forensic Science	
ANTH 2282	Introducing Forensic Anthropology	
ANTH 3471	Forensic Skeletal Identification	
ANTH 3472	Forensic Skeletal Analysis	
ANTH 3473	Forensic Facial Anatomy	
BIOL 2307	Genetics	
PSYC 3130	Drugs and Behaviour (formerly PSYC 3349) (Group A)	
PSYC 3710	Psychology and Law (formerly PSYC 3320) (Group B)	

PSYC 3720	Forensic Psychology (formerly PSYC 3338) (Group B)
PSYC 4710	Advanced Psychology and Law (formerly PSYC 4443) (Group B)
PSYC 4720	Advanced Forensic Psychology (formerly PSYC 4438) (Group B)
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Total Credit Hours	
24	