

FORENSIC SCIENCE, B.S.

Forensic science is the scientific method of gathering and analyzing evidence. The forensic science major at Saint Louis University is an interdisciplinary program that employs the methods, tools and perspectives of biology, chemistry, anthropology, physics, mathematics and medicine to better understand the intersection of law and science.

Forensic science is well known for its application in civil and criminal law. However, the field is quite broad and has important applications in natural and man-made disasters, accidents, and historical/archaeological evaluations of lifestyles and causes of death.

Forensic science is an appropriate major for all students who want to pursue graduate studies or professional work in any scientific or professional field. Completing the major places students in a position to address the scientific basis of civil and criminal law through further legal studies or research.

Curriculum Overview

SLU's forensic science major follows the guidelines for accreditation standards of the Forensic Science Education Programs Accreditation Commission (FEPAC).

SLU has two concentrations within the forensic science major for students to choose from: Criminalistics or Crime Scene Investigation. Both of these concentrations provide students with the hands-on application of scientific techniques to investigations.

The Criminalistics concentration is a science-focused concentration for those students interested in working in a crime laboratory, medical school or scientific research across a broad spectrum of industries. Students in this concentration also can work in fields such as crime scene investigation and death investigation.

The Crime Scene Investigation concentration is an interdisciplinary concentration combining forensic science, criminal justice, psychology, and introductory biology/chemistry courses for those students interested in work in fields such as crime scene investigation, death investigation, fingerprints and firearms. The crime scene concentration also provides paths for law school and graduate school.

A degree in this fascinating and quickly developing scientific field enables students to compete with the most accomplished and well-educated students from prestigious universities on a national and global level. Upon completing the major in forensic science, students will be well-versed in scientific methodology and equipped to apply their understanding of law and science across various industries.

Fieldwork and Research Opportunities

The department has connections with forensic science laboratories in the St. Louis metropolitan area. Fieldwork internships and/or independent research are required for forensic science majors, which can include working at an operating forensic science lab and performing forensic research projects in those labs or at Saint Louis University.

Fieldwork practicums also allow students to be involved in the laboratories of law enforcement agencies and legal and medical organizations in the area. Students should meet with the department internship director for assistance when applying for local, regional, national and international internship opportunities.

The Forensic Science Laboratory is a 1,000-square-foot teaching and research lab with the latest hardware, software and safety equipment, as well as materials used to apply forensic science techniques. The program also hosts the Forensic Science Club, which offers forensic-related activities and exploration and a Forensic Science Honor Society. In addition, the program provides a mentor program for freshmen to be connected with a junior/senior Forensic Science major.

Careers

Recent graduates who majored in forensic science at SLU work in various fields, including DNA analysts, fingerprint examiners, firearms examiners, death/crime scene investigators, drug chemists, forensic toxicologists, chemical/pharmaceutical researchers and others. Alumni have also gone onto top graduate programs in the country in forensic science, pathology, medicine, law, forensic anthropology, veterinary and health service.

Admission Requirements

Begin Your Application (<http://www.slu.edu/apply.php>)

Saint Louis University also accepts the Common Application.

Freshman

All applications are thoroughly reviewed with the highest degree of individual care and consideration to all credentials that are submitted. Solid academic performance in college preparatory coursework is a primary concern in reviewing a freshman applicant's file.

To be considered for admission to any Saint Louis University undergraduate program, applicants must be graduating from an accredited high school, have an acceptable HiSET exam score or take the General Education Development (GED) test.

Transfer

Applicants must be a graduate of an accredited high school or have an acceptable score on the GED.

Students who have attempted fewer than 24 semester credits (or 30 quarter credits) of college credit must follow the above freshmen admission requirements. Students who have completed 24 or more semester credits (or 30 quarter credits) of college credit must submit transcripts from all previously attended college(s).

In reviewing a transfer applicant's file, the Office of Admission holistically examines the student's academic performance in college-level coursework as an indicator of the student's ability to meet the academic rigors of Saint Louis University. Where applicable, transfer students will be evaluated on any courses outlined in the continuation standards of their preferred major.

International Applicants

All admission policies and requirements for domestic students apply to international students along with the following:

- Demonstrate English Language Proficiency (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/english-language-proficiency/>)
- Proof of financial support must include:
 - A letter of financial support from the person(s) or sponsoring agency funding the time at Saint Louis University
 - A letter from the sponsor's bank verifying that the funds are available and will be so for the duration of study at the University

- Academic records, in English translation, of students who have undertaken postsecondary studies outside the United States must include the courses taken and/or lectures attended, practical laboratory work, the maximum and minimum grades attainable, the grades earned or the results of all end-of-term examinations, and any honors or degrees received. WES and ECE transcripts are accepted.

Tuition

Tuition	Cost Per Year
Undergraduate Tuition	\$52,260

Additional charges may apply. Other resources are listed below:

Net Price Calculator (<https://www.slu.edu/financial-aid/tuition-and-costs/calculator.php>)

Information on Tuition and Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition/>)

Miscellaneous Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/fees/>)

Information on Summer Tuition (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer/>)

Scholarships and Financial Aid

There are two principal ways to help finance a Saint Louis University education:

- **Scholarships:** Scholarships are awarded based on academic achievement, service, leadership and financial need.
- **Financial Aid:** Financial aid is provided through grants and loans, some of which require repayment.

Saint Louis University makes every effort to keep our education affordable. In fiscal year 2022, 99% of first-time freshmen and 90% of all students received financial aid (<https://www.slu.edu/financial-aid/>) and students received more than \$445 million in aid University-wide.

For priority consideration for merit-based scholarships, apply for admission by December 1 and complete a Free Application for Federal Student Aid (FAFSA) by March 1.

For information on other scholarships and financial aid, visit www.slu.edu/financial-aid (<https://www.slu.edu/financial-aid/>).

Learning Outcomes

1. Graduates will be able to identify and explain major concepts and their categories of evidence, patterns of evidence, trends in forensic science, and the scientific basis of investigative and analytical methods.
2. Graduates will be able to recognize the limitations of evidence and the ethical responsibilities linked to decision making.
3. Graduates will be able to recognize, explain and apply basic research methods in forensic science, including research design, data analysis and interpretation.
4. Graduates will be able to engage in skeptical inquiry, think critically and creatively, and use a scientific approach to solve problems related to behavior and mental processes. Students will also be able to recognize the holistic nature of forensic science, law, society and ethics.

5. Graduates will be able to apply the knowledge of ethical issues inherent in the forensic sciences and the skill to be able to contribute to the profession through careful documentation and reporting of evidence, and the recognition and ethical reporting of errors.

Requirements

Forensic science students must complete a minimum total of **75 credits** for the major.

Code	Title	Credits
University Undergraduate Core (https://catalog.slu.edu/academic-policies/academic-policies-procedures/university-core/)		
Major Requirements		
FRSC 2600	Survey of Forensic Science	3
FRSC 2800	Professional Issues in Forensic Science	3
FRSC 3500	Forensics and Law	3
FRSC 3620 & FRSC 3621	Chemical Forensics and Chemical Forensics Laboratory	3
FRSC 3630 & FRSC 3631	Forensic Biology and Forensic Biology Laboratory	3
FRSC 4550 & FRSC 4551	Crime Scene Investigation and Crime Scene Investigation Laboratory	3
FRSC 4750	Forensic Science Senior Seminar	1
<i>Capstone Experience</i> *		3
Choose one of the following:		
FRSC 4910	Internship	
FRSC 4960	Capstone in Forensic Science	
FRSC 4970	Independent Research in Forensic Science	
<i>Concentration</i>		53
Choose a Concentration:		
Criminalistics Concentration (p. 2)		
Crime Scene Investigation Concentration (p. 3)		
General Electives		19-22
Total Credits		120

* A second capstone experience can be completed for elective Forensic Science credits.

Continuation Standards

Students with a major in forensic science must maintain a 2.00 GPA in their major coursework.

Criminalistics Concentration

Code	Title	Credits
Forensic Science courses		2
<i>Choose a minimum of 2 credits in courses with a Forensic Science FRSC Elective Attribute such as:</i>		
FRSC 3150X	True Crime: Forensic and Literary Perspectives	
FRSC 3400	Digital Forensic Investigation	
FRSC 3640	Fingerprints	
FRSC 4610	Death Investigation	
FRSC 4650 & FRSC 4651	Advanced Crime Scene Reconstruction and Advanced Crime Scene Reconstruction Laboratory	
Biology courses		

BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory	4
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4

Chemistry courses

CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
CHEM 2410 & CHEM 2415	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 2420 & CHEM 2425	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4

Physics courses

PHYS 1310 & PHYS 1320	Physics I and Physics I Laboratory	4
PHYS 1330 & PHYS 1340	Physics II and Physics II Laboratory	4

Mathematics courses

MATH 1510	Calculus I	4
STAT 1300	Elementary Statistics with Computers	3

BIOL/CHEM Elective courses 12

Choose 12 credits of a science specialization from 3000 or 4000 level BIOL and/or CHEM courses with a Forensic Science BIOL/CHEM Elective attribute, including a minimum of two laboratory courses with a Forensic Science BIOL/CHEM Lab Elective attribute.

Total Credits 53

Crime Scene Investigation Concentration

Code	Title	Credits
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Forensic Science courses

FRSC 3640	Fingerprints	3
FRSC 4650 & FRSC 4651	Advanced Crime Scene Reconstruction and Advanced Crime Scene Reconstruction Laboratory	3

Choose 9 credits from courses with a Forensic Science FRSC Elective attribute such as:

FRSC 3150X	True Crime: Forensic and Literary Perspectives	
FRSC 3400	Digital Forensic Investigation	
FRSC 4610	Death Investigation	
FRSC 4615	Advanced Death Investigation	
FRSC 3930	Special Topics	

Anthropology

ANTH 3280	Forensic Anthropology	3
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Biology and/or Chemistry courses 8

Choose 2 course sequences below for a total of 8 credits:

BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory	
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	

CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	
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Mathematics course

STAT 1300	Elementary Statistics with Computers	3
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Criminal Justice courses

CCJ 1010	Introduction to Criminal Justice	3
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Choose 9 credits from courses with a Forensic Science CCJ Elective attribute such as:

CCJ 2150	Criminology: Nature of Crime	
CCJ 3400	Victimology & Victimization	
CCJ 3350	Understanding Serial Killers	
CCJ 4050	Criminal Law & Procedure	
CCJ 4150	Criminal Investigations	

Psychology, Biology, and/or Chemistry courses 12

Choose 12 credits from courses with a Forensic Science BIOL/CHEM Elective attribute or Forensic Science PSY Elective attribute

Total Credits 53

Graduation Requirements

- Complete a minimum of 120 credits (excluding pre-college level courses numbered below 1000).
- Complete the University Undergraduate Core curriculum requirements.
- Complete major requirements: minimum of 30 credits required.
- Complete remaining credits with a second major, minor, certificate and/or electives to reach the minimum of 120 credits required for graduation.
- Achieve at least a 2.00 cumulative grade point average, a 2.00 grade point average in the major(s), and a 2.00 grade point average in the minor/certificate, or related elective credits.
- Complete department-/program-specific academic and performance requirements.
- Complete at least 50% of the coursework for the major and 75% for the minor/certificate through Saint Louis University or an approved study abroad program.
- Complete 30 of the final 36 credits through Saint Louis University or an approved study abroad program.
- Complete an online degree application by the required University deadline.

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Crime Scene Investigation Concentration

Course	Title	Credits
Year One		
Fall		
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (Can do two semesters of Gen Bio (I and II) in lieu of Gen Chem)	4
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory (Can do two semesters of Gen Chem (I and II) in lieu of Gen Bio)	4
CCJ 1010	Introduction to Criminal Justice	3
CORE 1000	Ignite First Year Seminar	2-3
CORE 1500	Cura Personalis 1: Self in Community	1
Credits		14-15
Spring		
FRSC 2600	Survey of Forensic Science (satisfies CORE 3200. Note: This course is also offered during the winter and summer sessions.)	3
PSY 1010	General Psychology	3
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication	3
CORE 1600	Ultimate Questions: Theology	3
General Electives		3
Credits		15
Year Two		
Fall		
CCJ 2150	Criminology: Nature of Crime	3
STAT 1300	Elementary Statistics with Computers (satisfies CORE 3200)	3
FRSC 2800	Professional Issues in Forensic Science (satisfies CORE 3200)	3
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
Credits		15
Spring		
FRSC 3640	Fingerprints	3
FRSC 3620 & FRSC 3621	Chemical Forensics and Chemical Forensics Laboratory	3
PSY/BIO/CHEM ELECTIVE		3
CORE 2500	Cura Personalis 2: Self in Contemplation	0
General Electives		6
Credits		15
Year Three		
Fall		
FRSC 3500	Forensics and Law	3
FRSC 3400	Digital Forensic Investigation	3
FRSC 3630 & FRSC 3631	Forensic Biology and Forensic Biology Laboratory	3
CCJ ELECTIVE		3

CORE 2800	Eloquentia Perfecta 3: Creative Expression	3
Credits		15
Spring		
ANTH 3280	Forensic Anthropology	3
FRSC 4610	Death Investigation	2
PSY/BIO/CHEM Elective		3
CCJ Elective		3
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
General Electives		2
Credits		16
Summer		
Forensics Internship/ Capstone/ Research	Student must take 1 of the 3 listed prior to graduation	3
Credits		3
Year Four		
Fall		
FRSC 4550 & FRSC 4551	Crime Scene Investigation and Crime Scene Investigation Laboratory (Collaborative Inquiry)	3
FRSC Elective		3
PSY/BIO/CHEM Elective		3
CORE 3500	Cura Personalis 3: Self in the World	1
General Electives		5
Credits		15
Spring		
FRSC 4750	Forensic Science Senior Seminar	1
FRSC 4650 & FRSC 4651	Advanced Crime Scene Reconstruction and Advanced Crime Scene Reconstruction Laboratory	3
FRSC 3150	True Crime and Literature	3
General Electives		6
Credits		13
Total Credits		121-122

Program Notes

Specialized Elective Courses: **Look for Forensic Science Elective Attributes under PSY, BIOL, and CHEM** courses to see what counts towards the 12 credit hours for electives.

NOTE: If you are interested in studying abroad, meet with your faculty mentor to determine what classes can be taken abroad and if any of the above schedule needs to be rearranged.

Criminalistics Concentration

Course	Title	Credits
Year One		
Fall		
CHEM 1110 & CHEM 1115	General Chemistry 1 and General Chemistry 1 Laboratory	4
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory	4
MATH 1510	Calculus I (satisfies CORE 3200)	4

CORE 1000	Ignite First Year Seminar	2-3
CORE 1500	Cura Personalis 1: Self in Community	1
Credits		15-16
Spring		
CHEM 1120 & CHEM 1125	General Chemistry 2 and General Chemistry 2 Laboratory	4
BIOL 1260 & BIOL 1265	General Biology: Transformations of Energy and Matter and Principles of Biology II Laboratory	4
FRSC 2600	Survey of Forensic Science (satisfies CORE 3200)	3
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication	3
CORE 1600	Ultimate Questions: Theology	3
Credits		17
Year Two		
Fall		
CHEM 2410 & CHEM 2415	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
BIOL/CHEM Science Elective	See note below for DNA or Drug chemistry careers	3
FRSC 2800	Professional Issues in Forensic Science (satisfies CORE 3200)	3
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
Credits		16
Spring		
CHEM 2420 & CHEM 2425	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
BIOL/CHEM Science Elective	See note below for DNA or Drug chemistry careers	3
MATH 1300	Elementary Statistics with Computers	3
CORE 2500	Cura Personalis 2: Self in Contemplation	0
General Elective		3
Credits		13
Year Three		
Fall		
FRSC 3620 & FRSC 3621	Chemical Forensics and Chemical Forensics Laboratory	3
PHYS 1310 & PHYS 1320	College Physics I and College Physics I Laboratory	4
FRSC 3500	Forensics and Law	3
CORE 2800	Eloquentia Perfecta 3: Creative Expression	3
Credits		13
Spring		
FRSC 3630 & FRSC 3631	Forensic Biology and Forensic Biology Laboratory	3
BIOL/CHEM Science Elective with Lab	See note below for DNA or Drug chemistry careers	4
PHYS 1330 & PHYS 1340	College Physics II and College Physics II Laboratory	4

CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
Credits		14
Summer		
Forensics Internship/ Capstone/ Research	Student must take 1 of the 3 listed prior to graduation	3
Credits		3
Year Four		
Fall		
FRSC 4550 & FRSC 4551	Crime Scene Investigation and Crime Scene Investigation Laboratory (Collaborative Inquiry)	3
FRSC 4610	Death Investigation (Note: Death investigation is generally offered in the fall and spring semesters)	2
BIOL/CHEM Science Elective with Lab	See note below for DNA or Drug chemistry careers	4
CORE 3500	Cura Personalis 3: Self in the World	1
General Electives		5
Credits		15
Spring		
FRSC Forensic Elective		3
BIOL/CHEM Science Elective	See note below for DNA or Drug chemistry careers	3
Forensics Internship/ Capstone/ Research	Student must take 1 of the 3 listed prior to graduation	3
FRSC 4750	Forensic Science Senior Seminar	1
General Electives		5
Credits		15
Total Credits		121-122

Program Notes

Specialized Science Elective Courses: minimum 12 credit hours and must include at least 2 courses with a laboratory. **Look for Forensic Science Elective Attributes under BIOL and CHEM 3000/4000 level courses** to see what counts towards the 12 credit hours for science electives and laboratories

NOTE: If you are interested in studying abroad, meet with your faculty mentor to determine what classes can be taken abroad and if any of the above schedule needs to be rearranged.

NOTE: For career in Forensic DNA analysis: Must have at least 3 credits in each of the following subjects: Statistics, Genetics, Molecular Biology, and Biochemistry

NOTE: For careers in Drug chemistry or toxicology: Recommend taking Analytical Chemistry with Laboratory