

Forensic Science & Law, Technology and Culture - B.S.

B.S. in Forensic Science and LTC

This double major provides training in both forensic science and the law. Forensic science is the application of sciences to matters of law. The Bachelor of Science in Forensic Science requires foundational coursework in mathematics and the natural sciences. In addition, students complete the program's forensic science core, which is designed to equip students with a background in forensic science core concepts, evidence collection, technical analysis, data interpretation, and professional regulatory practices. Students complete advanced coursework in analytical chemistry as well as upper-level courses in one of the program's three options: digital forensics, forensic biology, or forensic chemistry. Students must complete the Forensic Science Assessment Test (FSAT) in order to be certified for graduation. In addition to this, students will have the traditional pre-law training required for LTC majors. Students will complete Legal Foundations electives, LTC Core electives, a coop, and a law-related senior seminar.

B.S. in Forensic Science and LTC: Forensic Biology Option (125 credits)

First Year

1st Semester

		Credits
CHEM 125	General Chemistry I	3
CHEM 125A	General Chemistry Lab I	1
FYS SEM	First-Year Student Seminar	0
ENGL 101	English Composition: Introduction to Academic Writing	3
MATH 111	Calculus I	4
PHYS 111	Physics I	3
PHYS 111A	Physics I Lab	1
Term Credits		15

2nd Semester

CHEM 126	General Chemistry II	3
CHEM 126A	Gen Chemistry Lab II	1
ENGL 102	English Composition: Introduction to Writing for Research	3
MATH 112	Calculus II	4
PHYS 121	Physics II	3
PHYS 121A	Physics II Lab	1
Term Credits		15

Second Year

1st Semester

BIOL 200	Concepts in Biology	4
CHEM 243	Organic Chemistry I	3
FRSC 201	Intro to Forensic Science	3
MATH 333	Probability and Statistics	3
Term Credits		13

2nd Semester

BIOL 201	Found of Biol: Cell & Molecula	3
BIOL 202	Found of Biol: Cell & Molecula	1
CHEM 244	Organic Chemistry II	3
CHEM 244A	Organic Chemistry I Laboratory	2
FRSC 307	Crime Scene Investigation & Lab	4
History and Humanities GER 200 level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)		3
Term Credits		16

Third Year

1st Semester

BIOL 205	Foundations of Biology: Ecology and Evolution Lecture	3
BIOL 206	Foundations of Biology: Ecology and Evolution Lab	1

CHEM 222	Analytical Chemistry	3
CHEM 221	Analytical Chemical Methods	2
FRSC 359	Physical Methods of Forensic Analysis & Lab	4
Legal Foundations Elective ¹		3
Term Credits		16
2nd Semester		
BIOL 340	Mammalian Physiology	4
CHEM 473	Biochemistry	3
CHEM 475	Biochemistry Lab I	2
HIST 320	Law and Evidence ²	3
Term Credits		12
Fourth Year		
1st Semester		
HSS 404	Humanities, History and Social Sciences Senior Seminar ³	3
BIOL 352	Genetics	3
Legal Foundations Elective		3
LTC Core Elective		3
Term Credits		12
2nd Semester		
FRSC 479	Forensic Biology & Lab	4
FRSC 480	Forensic Microscopy & Lab	4
Select one of the following:		3
FRSC 490	Co-op Work Experience	
FRSC 491	Research & Indep Study I	
FRSC 495	Senior Seminar	
Legal Foundations Elective		3
Term Credits		14
Fifth Year		
1st Semester		
HIST 310	Co-op in Law, Technology, Culture and History I ⁵	3
or HIST 490	or Seminar - Research	
or R510 490	or Seminar:Research	
Computing GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/computer-science-ger/)		3
LTC Core Elective		3
LTC Core Elective		3
Term Credits		12
Total Credits		125

B.S. in Forensic Science and LTC: Forensic Chemistry Option (126 credits)

First Year

1st Semester

		Credits
CHEM 125	General Chemistry I	3
CHEM 125A	General Chemistry Lab I	1
FYS SEM	First-Year Student Seminar	0
ENGL 101	English Composition: Introduction to Academic Writing	3
MATH 111	Calculus I	4
PHYS 111	Physics I	3
PHYS 111A	Physics I Lab	1
Term Credits		15

2nd Semester

CHEM 126	General Chemistry II	3
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CHEM 126A	Gen Chemistry Lab II	1
ENGL 102	English Composition: Introduction to Writing for Research	3
MATH 112	Calculus II	4
PHYS 121	Physics II	3
PHYS 121A	Physics II Lab	1
Term Credits		15

Second Year**1st Semester**

CHEM 231	Physical Chemistry I	3
CHEM 243	Organic Chemistry I	3
FRSC 201	Intro to Forensic Science	3
MATH 211	Calculus III A	3
History and Humanities GER 200 level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)		3
Term Credits		15

2nd Semester

BIOL 200	Concepts in Biology	4
CHEM 244	Organic Chemistry II	3
CHEM 244A	Organic Chemistry I Laboratory	2
MATH 333	Probability and Statistics	3
Legal Foundations Elective ¹		3
Term Credits		15

Third Year**1st Semester**

BIOL 201	Found of Biol: Cell & Molecula	3
BIOL 202	Found of Biol: Cell & Molecula	1
CHEM 222	Analytical Chemistry	3
FRSC 307	Crime Scene Investigation & Lab	4
HIST 320	Law and Evidence ²	3
Term Credits		14

2nd Semester

BIOL 205	Foundations of Biology: Ecology and Evolution Lecture	3
BIOL 206	Foundations of Biology: Ecology and Evolution Lab	1
CHEM 221	Analytical Chemical Methods	2
CHEM 473	Biochemistry	3
CHEM 475	Biochemistry Lab I	2
FRSC 359	Physical Methods of Forensic Analysis & Lab	4
Term Credits		15

Fourth Year**1st Semester**

HSS 404	Humanities, History and Social Sciences Senior Seminar ³	3
FRSC 475	Forensic Chemistry & Lab	4
Computing GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/computer-science-ger/)		3
Legal Foundations Elective		3
Term Credits		13

2nd Semester

CHEM 480	Instrumental Analysis	2
FRSC 480	Forensic Microscopy & Lab	4
Select one of the following:		3
FRSC 490	Co-op Work Experience	
FRSC 491	Research & Indep Study I	

FRSC 495	Senior Seminar	
LTC Core Elective		3
Term Credits		12
Fifth Year		
1st Semester		
HIST 310 or HIST 490 or R510 490	Co-op in Law, Technology, Culture and History I ⁴ or Seminar - Research or Seminar:Research	3
Legal Foundation Elective		3
LTC Core Elective		3
LTC Core Elective		3
Term Credits		12
Total Credits		126

B.S. in Forensic Science and LTC– Digital Forensics Option (120 credits)

First Year		
1st Semester		
		Credits
CHEM 125	General Chemistry I	3
CHEM 125A	General Chemistry Lab I	1
FYS SEM	First-Year Student Seminar	0
ENGL 101	English Composition: Introduction to Academic Writing	3
MATH 111	Calculus I	4
PHYS 111	Physics I	3
PHYS 111A	Physics I Lab	1
Term Credits		15
2nd Semester		
CHEM 126	General Chemistry II	3
CHEM 126A	Gen Chemistry Lab II	1
ENGL 102	English Composition: Introduction to Writing for Research	3
MATH 112	Calculus II	4
PHYS 121	Physics II	3
PHYS 121A	Physics II Lab	1
Term Credits		15
Second Year		
1st Semester		
CS 100	Roadmap to Computing	3
FRSC 201	Intro to Forensic Science	3
CHEM 221	Analytical Chemical Methods	2
CHEM 222	Analytical Chemistry	3
MATH 333	Probability and Statistics	3
IT 120	Introduction to Network Technology	3
Term Credits		17
2nd Semester		
CS 113	Introduction to Computer Science I	3
FRSC 307	Crime Scene Investigation & Lab	4
IT 220	Wireless Networks	3
History and Humanities GER 200 level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)		3
Term Credits		13
Third Year		
1st Semester		
FRSC 359	Physical Methods of Forensic Analysis & Lab	4

IT 202	Internet Applications	3
IT 230	Computer and Network Security	3
LTC Core Elective		3
Legal Foundations Elective ¹		3
Term Credits		16
2nd Semester		
FRSC 480	Forensic Microscopy & Lab	4
HIST 320	Law and Evidence ²	3
IS 331	Database Design Management and Applications	3
Legal Foundation Elective		3
Free Elective ⁵		1
Term Credits		14
Fourth Year		
1st Semester		
HSS 404	Humanities, History and Social Sciences Senior Seminar ³	3
IT 330	Computer Forensic	3
IT 340	Introduction to System Administration	3
Legal Foundations Elective		3
Free Elective		3
Term Credits		15
2nd Semester		
IT 332	Digital Crime	3
IT 400	Information Technology and the Law	3
IT 430	Ethical Hacking for System Administrators	3
Select one of the following:		3
FRSC 490	Co-op Work Experience	
FRSC 491	Research & Indep Study I	
FRSC 495	Senior Seminar	
HIST 310	Co-op in Law, Technology, Culture and History I ⁴	3
or HIST 490	or Seminar - Research	
or R510 490	or Seminar:Research	
Term Credits		15
Total Credits		120

Legal Foundations Electives

Code	Title	Credits
HIST 342	Civil Rights Revolution and Law	3
HIST 361	The Founding of the American Nation	3
HIST 362	Sex, Gender, and the Law in American History	3
HIST 364	American Law in the World	3
HIST 369	Law and Society in History	3
HIST 395	Research Methods in Law and Society	3
MGMT 290	Business Law I	3
STS 300	Legal Reasoning, Writing, and Technology	3
R790 304	Intro Law And Legal Res	3

LTC Core Electives

Code	Title	Credits
EVSC 335	Environmental Law	3
HIST 320	Law and Evidence	3
HIST 338	Environmental Justice and Climate Change in America	3
HIST 370	Legal issues in the History of Media	3

HIST 375	Legal Issues in Environmental History	3
HIST 378	Medicine and Health Law in Modern America	3
HIST 384	Invention and Regulation	3
IE 447	Legal Aspects of Engineering	3
IT 331	Privacy and Information Technology	3
IT 332	Digital Crime	3
IT 400	Information Technology and the Law	3
R790 382	Environm Pol & Policy	3

¹ Course must satisfy the History and Humanities GER 30 (<https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/>)0 level (<https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/>).

² HIST 320 satisfies the History and Humanities GER 30 (<https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/>)0 level (<https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/>).

³ Must be an approved law-related HSS 404 History Seminar.

⁴ Students may take a History Research Seminar (HIST 490 or R510 490) instead of HIST 310 with the approval of the LTC advisor. Student projects in the history research seminar must be law-related.

⁵ HIST 312 recommended