

FORENSIC SCIENCE, B.S.

Begin Campus: Any Penn State Campus

End Campus: University Park

Degree Requirements

For the Bachelor of Science degree in Forensic Science, a minimum of 124-126 credits is required:

Requirement	Credits
General Education	45
Requirements for the Major	97-99

18 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 9 credits of GN courses; 6 credits of GQ courses; 3 credits of GH courses.

General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<http://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required.)

- **Quantification (GQ):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

Knowledge Domains

- **Arts (GA):** 6 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 6 credits
- **Social and Behavioral Sciences (GS):** 6 credits
- **Natural Sciences (GN):** 9 credits

Integrative Studies (may also complete a Knowledge Domain requirement)

- **Inter-Domain or Approved Linked Courses:** 6 credits

University Degree Requirements

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80>)). For more information, check the Suggested Academic Plan for your intended program.

Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44>).

Common Requirements for the Major (All Options)

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better</i>		
CHEM 110	Chemical Principles I	3
CHEM 111	Experimental Chemistry I	1
CHEM 112	Chemical Principles II	3
CHEM 113	Experimental Chemistry II	1
CHEM 210	Organic Chemistry I	3
CHEM 212	Organic Chemistry II	3
CHEM 213	Laboratory in Organic Chemistry	2
FRNSC 100	Introduction to Forensic Science	3
FRNSC 210	Essential Practices of Forensic Science	3
FRNSC 400	Courtroom Proceedings and Testimony	1
FRNSC 410	A Scientific Approach to Crime Scene Investigation	2
FRNSC 411	Criminalistics: Trace and Impression Evidence	3
FRNSC 413	Criminalistics: Biology	3
FRNSC 415W	Laboratory in Crime Scene Investigation	2
FRNSC 475	Forensic Science Seminar	1

FRNSC 485W	Coalescence of Forensic Science Concepts.	4
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
PHIL 132	Bioethics	3
STAT 250	Introduction to Biostatistics	3

Additional Courses*Additional Courses: Require a grade of C or better*

CRIM 100	Introduction to Criminal Justice	3
or CRIM 113	Introduction to Law	

Select one of the following sequences: 8

PHYS 211 & PHYS 212	General Physics: Mechanics and General Physics: Electricity and Magnetism	
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PHYS 250 & PHYS 251	Introductory Physics I and Introductory Physics II	
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Requirements for the Option

Select an option 34-36

Requirements for the Option**Forensic Biology Option (36 credits)**

Code	Title	Credits
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Prescribed Courses*Prescribed Courses: Require a grade of C or better*

BMB 251	Molecular and Cell Biology I	3
BMB 400	Molecular Biology of the Gene	3
BMB 401	General Biochemistry	3
BMB 442	Laboratory in Proteins, Nucleic Acids, and Molecular Cloning	3
FRNSC 421W	Forensic Molecular Biology	4
MICRB 201	Introductory Microbiology	3
MICRB 202	Introductory Microbiology Laboratory	2

Additional Courses*Additional Courses: Require a grade of C or better*

BIOL 222	Genetics	3
or BIOL 322	Genetic Analysis	

Select two of the following: 6

BIOL 405	Molecular Evolution	
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BIOL 422	Advanced Genetics	
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BIOL 460	Human Genetics	
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BMB 402	General Biochemistry	
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BMB 428	Physical Chemistry with Biological Applications	
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BMB 433	Molecular and Cellular Toxicology	
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Supporting Courses and Related Areas

Select 6 credits in consultation with adviser 6

Forensic Chemistry Option (34 credits)

Code	Title	Credits
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Prescribed Courses*Prescribed Courses: Require a grade of C or better*

BIOL 110	Biology: Basic Concepts and Biodiversity	4
BIOL 230W	Biology: Molecules and Cells	4
CHEM 227	Analytical Chemistry	4
CHEM 425W	Chromatography and Electrochemistry	4
FRNSC 427W	Forensic Chemistry	4

Additional Courses*Additional Courses: Require a grade of C or better*

Select three of the following: 9

BMB 428	Physical Chemistry with Biological Applications	
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CHEM 410	Inorganic Chemistry	
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CHEM 412	Transition Metal Chemistry	
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CHEM 423W	Chemical Spectroscopy	
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CHEM 430	Structural Analysis of Organic Compounds	
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CHEM 431W	Organic and Inorganic Preparations	
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CHEM 450	Physical Chemistry - Thermodynamics	
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CHEM 452	Physical Chemistry - Quantum Chemistry	
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Supporting Courses and Related Areas

Select 6 credits in consultation with adviser 6