# PHD IN FORENSIC SCIENCE

## **Mission**

The mission of the PhD in Forensic Science program is to develop visionary professionals in forensic science who are equipped with exceptional critical thinking abilities, advanced problem-solving skills, and in-depth discipline-specific knowledge who can independently translate principles into practice. Through rigorous academic coursework, research excellence, and interdisciplinary collaboration, we prepare our graduates to excel in leadership positions where they can significantly contribute to the advancement of forensic science, its application, and communication in the justice system.

This is accomplished by demonstrating the ability to perform independent, original research; the successful completion of multidisciplinary academic coursework; hands-on experience in the laboratory; and collaboration with accredited forensic laboratories, institutes, and partners.

#### **Educational Objectives**

- 1. Provide students the knowledge, skills, and abilities to prepare them for successful careers in forensic science.
- 2. Develop students' critical thinking ability, problem-solving skills, and advanced discipline-specific knowledge.
- 3. Produce high quality graduates capable of advancement into leadership positions.
- 4. Engage in collaborative research that demonstrates industrial relevance and wider scientific awareness.

The PhD in Forensic Science requires the completion of 86 credit hours beyond the bachelor's degree. Students complete:

Code	Title	Hours
Requirements		
Core Coursework		43
Dissertation Research		15
Electives <sup>1</sup>		28
Total Hours		86

Dissertation research hours may be substituted for electives (15 SCH maximum) with approval of the Department Chair.

The curriculum is designed to deliver an essential core curriculum in forensic science, together with specialized electives and intensive research in the area of interest. Students are expected to fulfill the requirements during approximately five years of full-time study.

Students with an MS in Forensic Science from a FEPAC-accredited institution may be eligible to transfer credit towards the eighty-six credit hour requirement.

### **Program Breakdown**

Degree Type	Doctor of Philosophy (Ph.D.)
Length	86 credit hours
Enrollment	Fall
Tuition/Costs	Rates per Semester

Additional information: Reference the Program Landing Page (https://www.shsu.edu/programs/doctorate/forensic-science/) for additional information, such as cost, delivery format, contact information, or to schedule a visit.

Review of applications and offers of admission will begin Jan. 15 and proceed until enrollment openings are filled. A holistic review of each student's application will be completed on a competitive basis. All applicants are automatically considered for graduate assistantships in the Department of Forensic Science.

Please submit all documents to the Office of Graduate Admissions. Admission considerations include:

- 1. Graduate Application (http://www.shsu.edu/admissions/apply-texas.html)
- 2. Application fee (http://www.shsu.edu/dept/graduate-studies/application-fee.html)
- 3. A bachelor's degree from an accredited institution in chemistry, biology, forensic or natural science
- 4. Completion of eight credit hours (two semesters or equivalent) of organic chemistry with laboratories
- 5. Official transcripts from all colleges/universities attended
- 6. GPA of 3.5 or higher (strongly preferred)
- 7. Official GRE (https://www.ets.org/gre/) scores
- 8. Three letters of recommendation with Admission Recommendation Checklists. At least two must be from academic sources

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- 9. A personal statement of 500 750 words
- 10. A current resume or vita

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- 11. TOEFL/IELTS scores and third-party transcript evaluation for international students (if applicable)
- 12. A personal interview may be requested

The application checklist and instructions are available at Application Resources (https://www.shsu.edu/academics/forensic-science/admission.html).

Note: To be eligible for employment at forensic laboratories, students may need to complete additional foundational courses beyond the standard PhD degree requirements. For instance, prospective employees in Forensic Biology (https://www.swgdam.org/\_files/ugd/4344b0\_d73afdd0007c4ed6a0e7e2ffbd6c4eb8.pdf) must have completed a minimum of nine credit hours in upper-level biology courses, including biochemistry, genetics, and molecular biology. Additionally, prospective employees in Forensic Toxicology (https://www.txcourts.gov/media/1450308/license-requirements-doc-revised-010820.pdf) must have completed at least two courses, each carrying a minimum of three credit hours, in quantitative analysis and biochemistry, or similarly named courses.

The program requires the completion of a minimum of eighty-six hours of graduate credit, as prescribed in the curriculum.

Students must register full-time and maintain a 3.0 grade point average in all courses. In order to advance to candidacy students must have successfully completed (or be currently enrolled in) forty-four graduate credit hours of coursework and research. Students must submit a portfolio for review, write a formal research proposal, orally defend the proposal, and pass the qualifying examination (typically by the close of the second spring semester). Once the committee determines that the portfolio, proposal, oral defense, and examination performance are satisfactory, the student may enroll in dissertation research.

A minimum of fifteen hours of dissertation credits are required and students must maintain continuous enrollment until they graduate. Students must complete and defend a doctoral dissertation, which is the product of original scholarly research and is of sufficient publishable quality to represent a meaningful contribution to knowledge in the field of forensic science.

During the first year of study, students are exposed to the major forensic disciplines in addition to the forensic internship. After successfully completing core coursework during the first year, students identify their discipline of study and commence research under the direction of their faculty advisor.

Students with an MS in Forensic Science from a FEPAC-accredited institution may be eligible to transfer credit towards the eighty-six credit hour requirement.

Code	Title	Hours		
Doctor of Philosophy in Forensic Science				
Required Courses				
FORS 5445	Forensic Instrumental Analysis	4		
FORS 5117	Controlled Substances	1		
FORS 5360	Pattern and Physical Evidence Concepts	3		
FORS 5435	Trace/Microscopical Analysis	4		
FORS 5440	Forensic Biology	4		
FORS 6446	Forensic Toxicology	4		
FORS 5116	Seminar In Forensic Science	1		
FORS 5226	Law And Forensic Sciences	2		
FORS 6224	Quality Assurance and Ethical Conduct in Forensic Science	2		
FORS 6014	Forensic Science Research <sup>1</sup>	6		
FORS 6371	Forensic Science Internship	3		
FORS 7331	Research Methods	3		
FORS 7332	Scientific Communications	3		
FORS 7390	Forensic Laboratory Management	3		
Prescribed Electives <sup>2</sup>				
Select twenty-eight semester credit hours of approved graduate courses in BIOL, CHEM, CRIJ, FORS, or PSYC.		28		
Dissertation				
FORS 8099	Dissertation <sup>3</sup>	15		
Total Hours		86		

FORS 6014 must be taken for a total of six credit hours.

Once the minimum number of dissertation research hours have been met, dissertation hours may be substituted for electives (15 SCH maximum) with approval of the department chair.

Once enrolled in FORS 8099, students must enroll in this course every semester until graduation.

The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The PhD in Forensic Science is designed to provide graduates with the following marketable skills:

- · Advanced discipline-specific knowledge.
- · Hands-on laboratory skills.
- Familiarity with legal, ethical, and quality assurance issues.
- · Critical thinking skills.
- · Impartiality and scientific objectivity.
- · Application of statistical concepts to forensic science.
- · Familiarity with consensus-based scientific standards in forensic science.
- · Advanced instrumental understanding and technical troubleshooting skills.
- · Ability to conduct original research.