Gateway to

COLLEGE OF ARTS & SCIENCES
EASTERN KENTUCKY UNIVERSITY

Learning - Discovery - Community

FORENSIC SCIENCE (B.S.)

DEPARTMENT OF CHEMISTRY
COLLEGE OF ARTS & SCIENCES
EASTERN KENTUCKY UNIVERSITY

Forensic Science at EKU

Forensic Science is the application of scientific principles and technological practices to the study and resolution of criminal, civil, and regulatory issues. The academic program leading to the B. S. degree in Forensic Science is designed to prepare students for careers in forensic laboratories. There are two degree options within this program: Forensic Chemistry or Forensic Biology. The Forensic Biology Option is oriented towards forensic DNA analysis. The Forensic Chemistry Option includes drug analysis, toxicology, and trace analysis (paint, glass, hair, and arson debris).

Almost two hundred students have graduated with the B.S. degree in Forensic Science since the program was initiated in the late 1970's. The Forensic Science Program at EKU is one of only eight undergraduate programs in the U.S. that is fully accredited by the Forensic Science Education Programs Accreditation Commission (FEPAC) of the American Academy of Forensic Sciences.

Careers in Forensic Science

Graduates of the EKU Forensic Science Program have found employment in county, regional, state and federal forensic laboratories throughout the country. Graduates are currently employed in twenty-four different states. The strong science background provided by the program also enables students to find employment outside the forensic field in such diverse areas as chemical industry, environmental laboratories, hospital toxicology labs, chemical instrumentation sales and pharmaceutical sales. Forensic Science graduates have also gone on to law school, dental school, and pathology assistant school, as well as into graduate programs in chemistry, toxicology, pharmaceutical sciences, and public administration.

Degree Programs

In addition to the B.S. program in Forensic Science with chemistry and biology options, the Department offers B.A. and B.S. programs in chemistry and the pre-professional degrees they support, plus a B.A. in Chemistry Teaching. The Pre-Pharmacy and pre-Chemical Engineering 2+2 and 2+3 programs can culminate in early transfer or completion of a degree at EKU.

Eastern Kentucky University

If you are serious about learning, Eastern Kentucky University is your kind of place. We're committed to helping you realize your potential and achieve your goals. And we'll work hard to provide you with a quality, life-changing learning experience.

As a student at EKU, you'll be taught, challenged and guided by professors who put teaching first. And because we maintain high standards set by national and regional accrediting agencies, we'll have high expectations for you as a student. You'll work hard, and we'll help you succeed.

Most of your classes at EKU will be small and will be taught by professors, not graduate students. You'll study in modern classrooms, laboratories, libraries and other facilities using state-of-the-art technology and equipment. And you'll discover opportunities to enhance classroom learning with hands-on experience through internships or the cooperative education program.

- A comprehensive, public university serving more than 16,000 students.
- Undergraduate and graduate excellence through more than 160 associate, baccalaureate, master's, specialist and cooperative doctoral programs.
- Quality and diversity in faculty and staff.
- Student/professor ratio of 17:1
  66-acre main campus in Richmond, educational centers in Corbin, Danville and Manchester, and academic offerings at other sites throughout the Commonwealth.

For More Information

Office of Admissions
SSB CPO 54
Eastern Kentucky University
521 Lancaster Avenue
Richmond, KY 40475-3102
www.admissions.eku.edu
800-465-9191
859-622-2106

Department of Chemistry
Moore 337
Eastern Kentucky University
521 Lancaster Avenue
Richmond, KY 40475-3102
www.chemistry.eku.edu
Diane.Vance@eku.edu
859-622-2908

Education For Life.

EKU
Eastern Kentucky University

WWW.EKU.EDU

FORENSIC SCIENCE (B.S.)

Major Requirements ..... **49-56 hours**
Core Requirements ..... **39-40 hours**
CHE 111, 115, 112, 116 or 116H, 325, 361, 362, 366, 367, 470, FOR 301, 411, 465, 495* and must include one of the following options.
Forensic Chemistry Option ..... **16 hours**
FOR 412, 451, six hours of 400 level forensic science electives, three hours upper division chemistry electives.**
Forensic Biology Option ..... **10-11 hours**
BIO 315, 331 or 531; CHE 530 or 531.
Supporting Course Requirements ..... **24-25 hours**
BIO 121, LAS 210 or PLS 316; MAT 124*** or 261***; PHY 131 or 201; PHY 132 or 202; STA 270.
General Education Requirements ..... **30 hours**
Standard General Education program, excluding blocks II, IVA, IVB, VII (3 hours), and VIII (6 hours). Refer to Section Four of this *Catalog* for details on the General Education and University requirements.
University Requirement ..... **1 hour**
ASO 100.
Free Electives ..... **16-24 hours**
Total Curriculum Requirements ..... **128 hours**

Must have a cumulative GPA of 2.5/4.0 or better.

* May be retaken to a maximum of 12 hours, but only the required six hours are counted toward the major.

** CHE 330, 349 and 495 may not be used toward the upper division chemistry requirement.

***A preparatory course in mathematics (MAT 109) may be required before admission to calculus.

MINOR IN CHEMISTRY

A student may minor in chemistry by completing CHE 111, 115, CHE 112, 116 or 116H plus an additional 12 hours of upper division chemistry.

MINOR IN CHEMISTRY (TEACHING)

A student may obtain a teaching minor in chemistry by completing CHE 111, 115, CHE 112, 116 or 116H plus an additional 12 credits of upper division chemistry.

[Note: Given the scope of the required PRAXIS exam that must be passed for a certificate extension in chemistry, the following courses are particularly recommended for students seeking a teaching minor in chemistry: CHE 325, 330, 361/366, and 470.]

MAJOR COURSES

BIO 315	Genetics
BIO 331	Cell Biology
BIO 531	Principles of Molecular Biology I
CHE 111	General Chemistry I
CHE 112	General Chemistry II
CHE 115	General Chemistry Lab I
CHE 116	General Chemistry Lab II
CHE 116H	General Chemistry Honors Lab II
CHE 325	Quantitative Analytical Chemistry
CHE 361	Organic Chemistry I
CHE 362	Organic Chemistry II
CHE 366	Organic Chemistry Lab I
CHE 367	Organic Chemistry Lab II
CHE 470	Principles of Physical Chemistry
CHE 530	Biochemistry of Macromolecules
CHE 531	Metabolic Biochemistry
FOR 301	Intro. to Forensic Science
FOR 411	Analytical Methods in Forensic Science I
FOR 412	Analytical Methods in Forensic Science II
FOR 451	Forensic Microscopic Analysis
FOR 465	Expert Witness Testimony
FOR 495	Internship

SUPPORTING COURSES

BIO 121	Principles of Biology
LAS 210	Intro. to Law
MAT 124	Calculus I
MAT 261	Calculus with Applications for Science
PHY 131	College Physics I
PHY 132	College Physics II
PHY 201	University Physics I
PHY 202	University Physics II
PLS 316	Criminal Evidence
STA 270	Applied Statistics I