FORENSIC CHEMISTRY, BS

Program Description

The Bachelor of Science in Forensic Chemistry combines elements of criminal justice and biology with a strong chemistry program. The forensic chemist analyzes and interprets materials collected at crime scenes, accidents, and at sites of terrorist activities. Graduates work in forensic laboratories for federal, state, or local government agencies, for private investigative laboratories, or may also go on to pursue a graduate degree. Forensic chemists graduate having been trained on state-of-the-art instrumentation and in techniques that are industry standards.

The LSSU chemistry program has been approved by the American Chemical Society and may provide certified degrees in Chemistry, Chemistry in Secondary Education, Biochemistry Pre-Professional, and Forensic Chemistry. Students pursuing the ACS-certified degree will participate in an applied research project in close collaboration with faculty members to address meaningful chemical-based problems.

Program Learning Outcomes

- Demonstrate proficiency in the following chemistry sub-disciplines: analytical chemistry, biochemistry, organic chemistry, and physical chemistry.
- Demonstrate readiness for employment as a laboratory forensic chemist, crime scene investigator or law enforcement laboratory chemist OR graduate or professional study.
- With the guidance of a faculty mentor, develop a well-designed, well-executed, and clearly communicated research project that contributes to scientific knowledge in the field of Forensic Chemistry.

Degree Requirements

Code	Title	Hours
Major Requirements		
NSCI 110	Introduction to Forensics	4
CHEM 115	General Chemistry I	5
CHEM 116	General Chemistry II	5
CHEM 199	Chemistry First Year Seminar	1
CHEM 225	Organic Chemistry I	4
CHEM 231	Quantitative Analysis	4
CHEM 299	Chemistry Sophomore Seminar	1
CHEM 326	Organic Chemistry II	4
CHEM 332	Instrumental Analysis	4
CHEM 351	Introductory Biochemistry	4
CHEM/CJUS 445	Forensic Sci I: Bio/Trace Evid	3
CHEM 446	Forensic Sci II:Drug/Explosive	3
Choose 2 Courses		7-8
CHEM 410	Molecular Spectroscopy	
CHEM 452	Adv Biochemical Molecular Tech	
CHEM 353	Medicinal Chemistry/Toxicology	
Support Courses		
CJUS 101	Introduction Criminal Justice	3
CJUS 243	Investigation	3
CJUS 319	Substantive Criminal Law	3
CJUS 409	Procedural Criminal Law	3
CJUS 444	Criminalistics	4
BIOL 131	General Biology: Cells	4
BIOL 132	General Biology: Organisms	4
BIOL 220	Genetics	4
MICR 205	Light Microscopy Techniques	1
MICR 315	Elect Microscopy/Microanalysis	2
MATH 112	Calculus Business/Life Science	4
MATH 207	Prin of Statistical Methods	3
PHYS 2X1	Physics I	4
PHYS 2X2	Physics II	4
Required for American Chemical Society Certified Degree [1]		
CHEM 395	Junior Seminar	1
CHEM 49X	Senior Research	2
CHEM 499	Senior Seminar	1
CHEM 261	Inorganic Chemistry	4
CHEM 361	Physical Chemistry I	4
CHEM 363	Phy Chem Lab:Kinetic/Reac Dy	1
MATH 151	Calculus I	4
MATH 152	Calculus II	4
Total Hours		**116-117**

[1] For American Chemical Society certified degree, additionally required (total lab hours must be at least 400 hrs). See Department Chair for special rules regarding ACS certification.

General Education: All LSSU bachelor's degree candidates must complete the LSSU General Education Requirements.

A minimum of 124 credits (at the 100 level or higher) must be earned for graduation with a cumulative gpa of 2.00 or higher. A gpa of 2.00 or higher is required in your Major, and a gpa of 2.00 or higher is required in your General Education Requirements.