FORENSIC CHEMISTRY (B.S.)

BS-AS FRC

Chemistry Department
Bachelor of Science (HEGIS 1999.20)

SAMC 164
(716) 878-5204

Forensic Science Education Programs Accreditation Commission (FEPAC) accredited

Forensic chemistry is a program of professional study whose graduates are prepared to assume entry-level positions as forensic scientists in federal, state, local, and corporate laboratories.

Admission Requirements

Prospective majors must complete CHE 111, CHE 112, CHE 113 and CHE 114 (or the equivalents) with minimum grades of C before applying to the program. Students who have not yet met these requirements will be accepted into the pre-forensic chemistry program (FRCW) and will be formally admitted to the major upon completion of the previously stated requirements.

Admission Recommendations

Transfer students from two-year colleges should also have earned credit for courses equivalent to

Code	Title	Credit Hours
CHE 201	ORGANIC CHEMISTRY I	3
CHE 202	ORGANIC CHEMISTRY II	3
CHE 203	ORGANIC CHEMISTRY LABORATORY I	1
CHE 204	ORGANIC CHEMISTRY LABORATORY II	1
MAT 161	CALCULUS I	4
MAT 162	CALCULUS II	4
MAT 163	USING TECHNOLOGY TO EXPLORE CALCULUS I	1
MAT 164	USING TECHNOLOGY TO EXPLORE CALCULUS II	1
PHY 111	UNIVERSITY PHYSICS I	5
PHY 112	UNIVERSITY PHYSICS II	5
BIO 211	INTRODUCTION TO CELL BIOLOGY AND GENETICS	4

to avoid possible delays in the completion of the degree program. Transfer students must complete a minimum of 10 credit hours in chemistry at Buffalo State. Chemistry courses taken elsewhere may be substituted for similar courses at Buffalo State only if they have equivalent prerequisites. Chemistry courses not meeting this criterion may be transferred as elective credit.

Important Note: Individuals seeking an internship or employment in a forensic science laboratory may be required to undergo an extensive background check including a lie detector test, fingerprinting, and drug testing.

Program Requirements

Code	Title	Credit Hours
Intellectual Foundations Requirements **(**http://ecatalog.buffalostate.edu/undergraduate/collegewide-degree-requirements-baccalaureate-degrees/#IF_Courses**)**		
33-39 credit hours		33-39
Required Courses in Chemistry (33 credit hours)		
CHE 111	FUNDAMENTALS OF CHEMISTRY I	3
CHE 112	FUNDAMENTALS OF CHEMISTRY II	3
CHE 113	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY I	1
CHE 114	LABORATORY FOR FUNDAMENTALS OF CHEMISTRY II	1
CHE 201	ORGANIC CHEMISTRY I	3
CHE 202	ORGANIC CHEMISTRY II	3
CHE 203	ORGANIC CHEMISTRY LABORATORY I	1
CHE 204	ORGANIC CHEMISTRY LABORATORY II	1
CHE 301	ANALYTICAL CHEMISTRY	4
CHE 331	PRINCIPLES OF PHYSICAL CHEMISTRY	3
CHE 403	INSTRUMENTAL ANALYSIS	3
CHE 404	INSTRUMENTAL ANALYSIS LAB	2
CHE 470	BIOCHEMISTRY I	3
CHE 471	BIOCHEMICAL TECHNIQUES	2
Required Courses in Forensic Science (19 credit hours)		
Forensic Science		
FOR 122	SCIENTIFIC CRIMINAL EVIDENCE ANALYSIS	3

FOR 312	CHEMISTRY AND CRIMINALISTICS	4
FOR 410	PROFESSIONAL PRACTICES IN FORENSIC SCIENCE	3
Advanced Forensic Science		
FOR 414	FORENSIC CHEMISTRY LABORATORY	
FOR 416	CHEMICAL MICROSCOPY	
or CHE 406	ANALYTICAL TOXICOLOGY	
Choose one from the following (Capstone):		
FOR 412	INTERNSHIP IN CRIMINALISTICS	
FOR 495	SPECIAL PROJECT	
Required Courses in Biology (8 credit hours)		
BIO 211	INTRODUCTION TO CELL BIOLOGY AND GENETICS	4
BIO 303	GENETICS	4
or BIO 350	GENES IN POPULATIONS	
Upper Division Elective Courses (3-4 credit hours)		
Select at least 3 credit hours from the following:		3-4
ANT 324	THE HUMAN SKELETON	
ANT 325	FORENSIC ANTHROPOLOGY	
BIO 305	MOLECULAR BIOLOGY	
BIO 308	SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	
BIO 309	LABORATORY SURVEY OF HUMAN ANATOMY AND PHYSIOLOGY	
BIO 314	ADVANCED CELL BIOLOGY	
BIO 316	GENERAL MICROBIOLOGY	
BIO 450	RECOMBINANT DNA TECHNOLOGY	
CHE 310	LITERATURE OF CHEMISTRY	
CHE 360	INTRODUCTION TO INORGANIC CHEMISTRY	
CHE 406	ANALYTICAL TOXICOLOGY (*)	
CHE 472	BIOCHEMISTRY II	
FOR 412	INTERNSHIP IN CRIMINALISTICS (**)	
FOR 416	CHEMICAL MICROSCOPY (*)	
FOR 495	SPECIAL PROJECT (**)	
GES 360	FORENSIC GEOSCIENCE	
PSY 375	FORENSIC PSYCHOLOGY	
Required Courses in Other Fields (23 credit hours)		
MAT 161	CALCULUS I	4
MAT 162	CALCULUS II	4
MAT 163	USING TECHNOLOGY TO EXPLORE CALCULUS I	1
MAT 164	USING TECHNOLOGY TO EXPLORE CALCULUS II	1
MAT 311	INTRODUCTORY PROBABILITY AND STATISTICS	3
PHY 111	UNIVERSITY PHYSICS I	5
PHY 112	UNIVERSITY PHYSICS II	5
All College Electives		
0-2 credit hours		0-2
Total Credit Hours		**120-126**

* May not be used as both an Advanced Forensic Science elective and as an elective course in this category.
**May not be used as both a capstone course and as an elective course in this category.