

Chemistry, B.S.

Forensic Chemistry Concentration

2024–25 Catalog

This example plan is designed to provide a blueprint for students to complete their degrees within four years. It includes recommended sequences of courses. Individual plans will vary based on previously earned credit, such as Dual Enrollment and AP credit, as well as the student's academic goals. Students will work with an academic advisor to develop a more individualized plan to complete their degree.

This example four-year plan is applicable to students admitted during the 2024–25 academic year.

Total credits required: 120 credits

Required GPA for graduation: 2.0 (institutional)

Students must maintain a 2.0 GPA over the 44–59 hours used to satisfy Field of Study and major requirements.

Courses requiring a C or better are denoted with an asterisk (*). Courses only offered in the fall semester are denoted with a plus sign (+). Courses only offered in the spring semester are denoted with a double-plus sign (++)

Legend is available on the last page of this document.

Year 1							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
CHEM 0001	First-Year Academic Seminar	1		ENGL 1102	English Composition II	3	Core
ENGL 1101*	English Composition I (pre-req to ENGL 1102)	3	Core	BIOL 1107* BIOL 1107L*	Principles of Biology I & Lab (pre-reqs to BIOL 2100)	4	Core
CHEM 1311+ CHEM 1311L+	Principles of Chemistry for Majors I & Lab (pre-reqs to CHEM 1312/1312L)	4	Field	CHEM 1312++ CHEM 1312L++	Principles of Chemistry for Majors II & Lab (pre-reqs to CHEM 2800 and 3010)	4	Field
MATH 1113*	Pre-Calculus (pre-req to MATH 1261 and 1401)	4	Core	MATH 1261*	Calculus I (pre-req to MATH 1262)	4	Field
GC1Y 1000	Critical Thinking (student's choice) (pre-req to GC2Y 2000)	3	Core				
Total Semester Hours:		15		Total Semester Hours:		15	
Summer	Summer is a good time to get ahead on courses. Several core courses are offered online over the summer terms.						
Notes:	ENGL 1101, ENGL 1102, Core Math, and GC1Y 1000 must be completed by 30 earned hours. First-Year Academic Seminar is a graduation requirement and impacts a student's GPA; however, it does not count toward the minimum of 120 semester hours required for a degree.						

Year 2							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
CHEM 2920+	Chemistry Seminar	1	Major	GC2Y 2000	Global Perspectives (student's choice)	4	Core
CHEM 3361 CHEM 3361L	Organic Chemistry I & Lab (pre-reqs to CHEM 3362/3362L and 3510)	4	Major	CHEM 3362 CHEM 3362L	Organic Chemistry II & Lab (pre-reqs to CHEM 3600L and 3711/3711L)	4	Major
MATH 1262	Calculus II (pre-req to PHYS 2212/2212L and CHEM 4211)	4	Field	PHYS 2212 PHYS 2212L	Principles of Physics II & Lab (pre-reqs to CHEM 4211)	4	Field
PHYS 2211 PHYS 2211L	Principles of Physics I (pre-reqs to PHYS 2212/2212L)	4	Field	CHEM 2800 CHEM 2800L	Quantitative Analysis & Lab (pre-reqs to CHEM 3200, 3400, 4410, and 4420)	4	Field
Core Humanities	Humanities and Ethics (student's choice)	3	Core				
Total Semester Hours:		16		Total Semester Hours:		16	
Notes:	GC2Y 2000 must be taken between 30–59 earned hours.						

Year 3							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
CHEM 3010+	Inorganic Chemistry (pre-req to CHEM 4410)	3	Major	CHEM 3200++	Instrumental Analysis (pre-req to CHEM 4410)	3	Major
CHEM 3711+	Biochemistry I (pre-req to CHEM 4420)	3	Major	CHEM 3600L++	Structural Chemistry	2	Major
CHEM 3920+	Chemistry Seminar (pre-req to CHEM 4920)	1	Major	BIOL 2100	Genetics	4	Conc
CHEM 3010L+ or CHEM 3711L+	Inorganic Chemistry Lab or Biochemistry I Lab	1	Capstone	HIST 2111 or HIST 2112	The United States to 1877 or The United States Since 1877	3	Core
CRJU 1100	Introduction to Criminal Justice	3	Conc	Lang 1002	World Language II (1002-level)	3	Foreign Lang
POLS 1101	American Government	3	Core				
Lang 1001	World Language I (1001-level)	3	Elective				
Total Semester Hours:		17		Total Semester Hours:		15	
Notes:	Students must complete a world language course at the 1002 level or higher. Complete the WebCAPE exam to determine placement for first course. Students who need to take a language course at the 1001 level may exceed 120 total credit						

Year 4							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
CHEM 4410	Forensic Trace Evidence and Material Analysis	3	Capstone	CHEM 4920++	Chemistry Seminar II	1	Major
CHEM 4211+ CHEM 4211L+	Physical Chemistry I & Lab (pre-req to CHEM 4212)	4	Major	CHEM 4212++	Physical Chemistry II	3	Major
CHEM 4999	Independent Study: Research (pre-req to CHEM 4920)	3	Capstone	CHEM 4420++ CHEM 4420L++	Forensic Drug and Biomaterials Analysis & Lab	4	Capstone
MATH 1401	Elementary Statistics	3	Conc	Core Art	Fine Arts (student's choice)	3	Core
CRJU 2350	Introduction to the Law	3	Conc	Core Social Science	Social Science (student's choice)	3	Core
Total Semester Hours:		16		Total Semester Hours:		14	
Notes:	CHEM 4211L in the fall can be substituted by CHEM 4212L in the spring. Visit graduate schools or apply for jobs during this year. General electives can be in any discipline and any level (1000–4999).						

Legend	
Area	This section of the plan references the area of the curriculum the course fulfills.
Core	Core IMPACTS — coursework required for every student regardless of major, which includes the following areas: Institutional Priority (GC1Y 1000 and GC2Y 2000); M athematics and Quantitative Skills; P olitical Science and U.S. History; A rts, Humanities, and Ethics; C ommunicating in Writing; T echnology, Mathematics, and Sciences; and S ocial Sciences.
Field	Core Field of Study courses, part of each major's requirements. These courses prepare students for further study in their chosen major field. Field of Study courses are specific to each major program.
Major	Chemistry Major requirements
Conc	Forensic Chemistry Concentration requirements
Capstone	Forensic Chemistry capstone experience: A culmination of everything the student has learned in the program.