

CHEMISTRY MAJOR, ACS CERTIFIED, B.S.

The ACS major is recognized by the American Chemical Society and designed to give graduates a more rigorous training in chemistry. The ACS major is recommended for those whose career goals include employment as a professional chemist or graduate school in chemistry. The ACS major requires:

Course	Title	Credits
General Requirements		
General Education (http://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/)		26-39
ACS Required Chemistry Courses		
CHEMSTRY 1140	General Chemistry I	4
CHEMSTRY 1240	General Chemistry II	4
CHEMSTRY 2150	Quantitative Analysis	4
CHEMSTRY 2730	Inorganic Chemistry	4
CHEMSTRY 3540	Organic Chemistry I	4
CHEMSTRY 3510	Organic Chemistry I Lab	1
CHEMSTRY 3630	Organic Chemistry II	3
CHEMSTRY 3610	Organic Chemistry II Lab	1
CHEMSTRY 3810	Chemical Synthesis and Characterization	1
CHEMSTRY 4130	Physical Chemistry	3
CHEMSTRY 4110	Physical Chemistry Lab I	1
CHEMSTRY 4230	Physical Chemistry	3
CHEMSTRY 4210	Physical Chemistry Lab II	1
CHEMSTRY 4240	Instrumental Analysis	4
CHEMSTRY 4630	General Biochemistry	3
CHEMSTRY 4320	Polymer and Supramolecular Chemistry	2
CHEMSTRY 4060	Chemistry Seminar	1
CHEMSTRY 4000	Undergraduate Research	1-3
or CHEMSTRY 4660	Cooperative Field Experience	
Required Supporting Courses from Math and Physics		
MATH 2640	Calculus and Analytic Geometry I	4
MATH 2740	Calculus and Analytic Geometry II	4
MATH 2840	Calculus and Analytic Geometry III	4
PHYSICS 1350	Introductory Physics I	5
or PHYSICS 2240	General Physics I	
PHYSICS 1450	Introductory Physics II	5
or PHYSICS 2340	General Physics II	
Total Credits		93-108

Study of a foreign language is recommended for students who plan to pursue graduate studies. In addition, substitution of calculus-based PHYSICS 2240/PHYSICS 2340 in place of algebra-based PHYSICS 1350/PHYSICS 1450 is strongly encouraged for ACS chemistry majors.

CHEMISTRY MAJOR, BIOCHEMISTRY EMPHASIS, ACS CERTIFIED, B.S.

The biochemistry emphasis is designed to provide the appropriate chemistry and biology background for students who plan to enter fields such as health care, agriculture, or biotechnology. The biochemistry emphasis includes all courses required for the standard chemistry major, as well as:

Course	Title	Credits
Required Chemistry and Biology Courses		
CHEMSTRY 4610	General Biochemistry Lab	1
CHEMSTRY 4830	Biochemistry Topics	3
CHEMSTRY 4910	Advanced Biochemistry Laboratory	1
CHEMSTRY 4320	Polymer and Supramolecular Chemistry	2
BIOLOGY 1650	The Unity of Life	5

BIOLOGY 2040	Cell Biology	4
BIOLOGY 3240	Microbiology	5
BIOLOGY 3330	Genetics	3
Total Credits		24

CHEMISTRY MAJOR, CRIMINALISTICS EMPHASIS, ACS TRACK, B.S.

The criminalistics emphasis ACS track will provide a chemistry major with sufficient background and training to qualify for criminalistic laboratory work. Criminalistics students electing the ACS track must complete all requirements for the ACS certified chemistry major, plus:

Course	Title	Credits
Required General Education Courses		
CRIMLJUS 1130	Introduction to Criminal Justice	3
BIOLOGY 1650	The Unity of Life	5
MATH 1830	Elementary Statistics	3
Technical Course Work		
FORENSIC 1320	Introduction to Crime Scene Investigation	3
FORENSIC 2420	Evidence Collection and Preservation	3
CHEMISTRY 3270	Forensic Chemistry ¹	2
FORENSIC 3140	Criminalistics	4
CHEMISTRY 4680	Criminalistics Emphasis Internship	8
Total Credits		31

The following are to be considered highly recommended electives: CRIMLJUS 3730, CRIMLJUS 4030, and CRIMLJUS 4330.

¹ Please note that CHEMISTRY 3270 also satisfies the Advanced Topics requirement for the American Chemical Society Certified component of the Criminalistics Emphasis in Chemistry ACS-Track program.