

CHEMISTRY MAJOR, STANDARD, B.S.

The chemistry major is designed to equip graduates with the skills, knowledge, and attitudes that are necessary to secure meaningful employment in a private-sector or government laboratory, or gain admission to a graduate or professional program. The standard chemistry major requires:

Course	Title	Credits
General Requirements		
General Education (https://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/)		26-39
Required Chemistry Courses		
CHEMSTRY 1140	General Chemistry I	4
CHEMSTRY 1240	General Chemistry II	4
CHEMSTRY 2150	Quantitative Analysis	4
CHEMSTRY 2730	Inorganic Chemistry ¹	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 4130	Physical Chemistry I	4
CHEMSTRY 4110	Physical Chemistry Lab I	1
CHEMSTRY 4240	Instrumental Analysis	4
CHEMSTRY 4630	General Biochemistry	3
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
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		83-98

¹ Not required for the forensic chemistry with DNA emphasis major.

In order to be licensed to teach science, students must complete the Science Education Major (<https://catalog.uwplatt.edu/undergraduate/liberal-arts-education/environmental-sciences-and-society/science-education-bs/>). This major requires students to acquire depth in a science discipline via completion of a 2nd major or minor, such as the Chemistry Major, Standard, B.S. or the Chemistry Minor (<https://catalog.uwplatt.edu/undergraduate/engineering-mathematics-science/chemistry/minor/>). This will improve marketability. Finally, students will also need to complete Middle-Secondary Education emphasis (<https://catalog.uwplatt.edu/undergraduate/liberal-arts-education/education/teacher-education/middle-and-secondary-education/>) through School of Education to acquire necessary professional education training.

For licensure in WI: Students must earn a minimum GPA of 2.75 in the major in order to student teach and be licensed. If you earn a minimum GPA of 3.0 in your major then you will not have to take the Praxis II content exam.

Students interested in securing secondary-education licensure should add ENVSS 3330 to the standard chemistry requirements.

The UW-Platteville School of Education program is designed to meet all of the educational requirements for the initial licensing in the State of Wisconsin. The program may not meet requirements of other states and we are unable to make a determination about whether the program meets requirements of other states. If you are interested in certification outside of the state of Wisconsin, we encourage you to contact the appropriate state licensing agency to seek guidance and verify requirements before beginning a program, as well as during your program of study. See Professional Licensure Directory by State (<https://publish.smartsheet.com/6e3fb27658f443588ff16ad36ccf5a94/>).

Students who expect to enter a graduate program in chemistry are recommended to choose one of the ACS certified majors.

CHEMISTRY MAJOR, BIOCHEMISTRY AND BIOTECHNOLOGY EMPHASIS, B.S.

This Biochemistry and Biotechnology Emphasis will allow UW-Platteville students to finish their undergraduate degree from UW-Platteville by inclusion of one semester of transfer credits (15 credits) from completion of the Biotechnology post-baccalaureate intensive certificate program (BPI) at Madison College. Students will successfully complete three and one half years (at least 105 credits) of baccalaureate studies including biotechnology prerequisite courses, general education requirements and major requirements for a baccalaureate degree from UW-Platteville. Successfully completed BPI coursework will transfer 15 credits (as Biology 3000T) to UW-Platteville and count toward the student's undergraduate degree in Chemistry granted by UW-Platteville. The student will also earn a postbaccalaureate certificate in Biotechnology upon successful completion of the requirements.

A minimum of 105 semester credits must be completed at UW-Platteville, including all general education competencies and biotechnology prerequisite courses as well as all chemistry major requirements:

Course	Title	Credits
General Requirements		
Core Curriculum (https://catalog.uwplatt.edu/undergraduate/degree-requirements/bachelor-of-science-degree-core-curriculum/)		26-39
Required Chemistry Courses		
CHEMSTRY 1140	General Chemistry I	4
CHEMSTRY 1240	General Chemistry II	4
CHEMSTRY 2150	Quantitative Analysis	4
CHEMSTRY 3540	Organic Chemistry I	4
CHEMSTRY 3510	Organic Chemistry I Lab	1
CHEMSTRY 4130	Physical Chemistry I	4
CHEMSTRY 4110	Physical Chemistry Lab I	1
CHEMSTRY 4240	Instrumental Analysis	4
CHEMSTRY 4630	General Biochemistry	3
CHEMSTRY 4610	General Biochemistry Lab	1
CHEMSTRY 4830	Biochemistry Topics	3
CHEMSTRY 4060	Chemistry Seminar	1
CHEMSTRY 4000	Undergraduate Research	1-3
or CHEMSTRY 4660	Cooperative Field Experience	
BIOLOGY 1650	The Unity of Life	5
BIOLOGY 3240	Microbiology	5
BIOLOGY 3330	Genetics	3
Required Supporting Courses from Math and Physics		
MATH 2640	Calculus and Analytic Geometry I	4
PHYSICS 1350	Introductory Physics I	5
PHYSICS 1450	Introductory Physics II	5
Total Credits		88-103

CHEMISTRY MAJOR, FORENSIC CHEMISTRY WITH DNA EMPHASIS, B.S.

The chemistry forensic chemistry with DNA emphases will provide a chemistry major with sufficient background and training to qualify for forensic laboratory work. Students electing the forensic chemistry with DNA emphasis complete the standard chemistry major, except CHEMSTRY 2730 and MATH 2740 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	Survey of Forensic Sciences	3
FORENSIC 2420	Crime Scene Processing I	3
FORENSIC 3140	Criminalistics	4

CHEMISTRY 3270	Forensic Chemistry	2
Required Chemistry and Biology Courses		
CHEMISTRY 4610	General Biochemistry Lab	1
CHEMISTRY 4830	Biochemistry Topics	3
BIOLOGY 2040	Cell Biology	4
BIOLOGY 3330	Genetics	3
BIOLOGY 4040	Molecular Biology	5
CHEMISTRY 4910	Advanced Biochemistry Laboratory	1
Total Credits		40

The following are to be considered highly recommended electives: CRIMLJUS 2330, CRIMLJUS 4030, and CRIMLJUS 4330.

CHEMISTRY MAJOR, HEALTH SCIENCE EMPHASIS, B.S.

The Health Science Emphasis will provide a chemistry major with sufficient background and training to not only complete a chemistry undergraduate degree but also adequately prepare them for admission to health science programs. Students electing this track will complete the standard chemistry major, except MATH 2740, plus:

Course	Title	Credits
Required General Education Courses		
BIOLOGY 1650	The Unity of Life	5
Required Chemistry and Biology Courses		
CHEMISTRY 4610	General Biochemistry Lab	1
BIOLOGY 1750	The Diversity of Life	5
BIOLOGY 2140	Human Anatomy and Physiology I	5
BIOLOGY 2240	Human Anatomy and Physiology II	5
BIOLOGY 3330	Genetics	3
Total Credits		24