

CHEMISTRY, MINOR

Chemistry is the study of the elementary parts and substances that make up our world, both the parts that occur in nature as well as man-made objects.

Chemistry is known as the "central science" because of its relationship to all other sciences. Thus, a minor in chemistry nicely complements any other science major.

Our alumni go into medical research, healthcare professions, manufacturing (particularly research and development), scientific writing and marketing, law (particularly areas of law that deal with science such as intellectual property), forensics and toxicology, aspects of engineering and production, teaching, sales, consulting, and government agency work.

The opportunity to participate in research as an undergraduate is a distinct advantage for UWM undergraduates. At most large, research universities, research opportunities for undergraduates are limited; there are fewer of them and they often are reserved for juniors or seniors. At UWM, you can get involved as early as freshman year. Students work directly with faculty and graduate students on their current research projects, and sometimes find themselves published in a peer-reviewed journal right alongside the faculty member. Participating in undergraduate research is an excellent way to enhance your resume for graduate school or employment.

Requirements

The minor in Chemistry consists of a minimum of 20 credits in chemistry, with at least 9 of these at or above the 300 level in residence at UWM.

Students must maintain an average GPA of 2.0 in all minor courses attempted at UWM. In addition, students must attain a 2.0 GPA on all minor courses attempted, including any transfer work. CHEM 106 does not count toward the minor and is not included in the minor GPA.

Code	Title	Credits
General Chemistry Requirement ¹		
CHEM 102	General Chemistry	5
CHEM 104	General Chemistry and Qualitative Analysis	5
Select one course from three of the following areas: ²		5-10
<i>Analytical:</i>		
CHEM 221	Elementary Quantitative Analysis	
CHEM 524	Instrumental Analysis	
<i>Biochemistry:</i>		
CHEM 501	Introduction to Biochemistry	
CHEM 601	Biochemistry: Protein Structure and Function	
CHEM 602	Biochemistry: Cellular Processes	
CHEM 603	Introduction to Biochemistry Laboratory	
CHEM 604	Biochemistry: Metabolism	
<i>Inorganic:</i>		
CHEM 311	Introduction to Inorganic Chemistry	
CHEM 611	Physical Inorganic Chemistry	
CHEM 614	Bio-Inorganic Chemistry	

<i>Organic:</i>	
CHEM 341	Introductory Survey of Organic Chemistry
CHEM 342	Introductory Organic Chemistry Laboratory
CHEM 343	Organic Chemistry
CHEM 344	Organic Chemistry Laboratory
CHEM 345	Organic Chemistry
<i>Physical:</i>	
CHEM 560	Biophysical Chemistry
CHEM 561	Physical Chemistry I
CHEM 562	Physical Chemistry II
CHEM 563	Physical Chemistry Laboratory
Total Credits	
15-20	

¹ Students without high school chemistry or whose background in science is weak may need to take CHEM 100 prior to enrolling in CHEM 102.

² At least one course with a laboratory, beyond general chemistry, must be taken.

Letters & Science Minor Advising

Advising for the minor takes place within the department by a faculty member or staff member. Follow the steps using the "Declare a Minor" button on the department's website which may include instructions on how to select a faculty advisor if there is more than one to choose from.

Students who already have an L&S college advisor because their degree plan is in L&S can discuss the minor with them as well since they will be familiar with any minor in L&S. Students who are working on a degree from a UWM college other than the College of Letters & Science will not need an L&S college advisor for just a minor and one will not be assigned. These students should work with the faculty or staff advisor they receive as part of the minor declaration process or contact the department directly for assistance.

Applicants who have not started classes at UWM yet who wish to declare a minor should wait until they are registered for their first UWM classes and then can declare the minor using the "Declare a Minor" button on the program's website. If you have questions about the minor before then, contact let-sci@uwm.edu.