

CHEMISTRY (BACHELOR OF SCIENCE, B.S.)

Requirements

*Effective Fall 2020, this program is scheduled for redesign. More information can be found [here](#).

Code	Title	Credit Hours
General Studies		
Students must complete General Studies courses (http://catalog.missouriwestern.edu/undergraduate/university-information/academic-standards-regulations/baccalaureate-degree/#bachelor-general-studies)		42-47
Major Requirements		
CHE 111	General Chemistry I	5
CHE 120	General Chemistry II with Qualitative Analysis	5
CHE 310	Organic Chemistry I	3
CHE 311	Organic Chemistry Laboratory I	2
CHE 312	Organic Chemistry II	3
CHE 313	Organic Chemistry Laboratory II	2
CHE 321	Quantitative Analysis	4
CHE 326	Instrumental Analysis	4
or CHE 426	Instrumental Methods	
CHE 370	Biochemistry I	4
CHE 380	Environmental Chemistry & Chemical Management	3
CHE 381	Physical Chemistry: Chemical Dynamics and Quantum Mechanics	3
CHE 382	Physical Chemistry Laboratory: Chemical Dynamics and Quantum Mechanics	1
CHE 383	Physical Chemistry: Thermodynamics and Kinetics	3
CHE 384	Physical Chemistry Laboratory: Thermodynamics and Kinetics	2
CHE 441	Advanced Inorganic Chemistry	3
CHE 442	Inorganic Synthesis	1
CHE 490	Research in Chemistry	1-3
CHE 495	Seminar in Chemistry	2
Select one of the following:		5-6
MAT 165	Calculus with Analytic Geometry I: Differentiation	
or MAT 166	Calculus with Analytic Geometry I: Integration	
MAT 167	Calculus with Analytic Geometry I	
MAT 177	Calculus with Analytic Geometry II	3
MAT 287	Calculus with Analytic Geometry III	3
PHY 210	University Physics I	5
PHY 211	University Physics II	5
CHE 445	Advanced Topics in Chemistry	3
or CHE 470	Biochemistry II	

University Graduation Requirements

1. Earn a minimum of 120 credit hours (100 level and higher, maximum of 6 CED credit hours applicable).
2. Earn a minimum of 30 credit hours in upper-division courses. Lower-division transfer courses accepted as meeting upper-division departmental course requirements cannot be used to fulfill this requirement.
3. Earn 30 of the last 45 credit hours at MWSU in institutional coursework (exclusive of credit by examination).
4. Participate in required departmental and campus wide assessments.
5. Fulfill the Missouri Constitution requirement.
6. Successfully pass the Missouri Higher Education Civics Achievement exam.