Bachelor of Science in Chemistry -- 120 Credits

JCHEM-BS (RG 287)

Effective August 2022

GENERAL EDUCATION REQUIREMENTS

REQUIRED COURSES (RG 6813)

Foundational Courses		CR	Satisfied/Term	
Engcmp 0005	Composition I	3		
Engcmp 0006	Composition II	3		
CommRc 0052	Public Speaking	3		
Basic Algebra or Placement Test				
Math 0001	Algebra 1	3		
Quantitative Reasoning (QR) - 1 Course				
Note - a student cannot test out of their QR requirement.				
		3		

FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

	CR	Satisfied/Term	

WORLDS OF KNOWLEDGE (RG 6825)

Aesthetic and Creative Expression (RQ 3148)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Global History & Culture (RQ 3149)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Societies & Civics (RQ 3150)					
Subject	Number	Course Title	CR	Satisfied/Term	
			3		
			3		

Science & Nature (RQ 3153)					
Subject	Number	Course Title	CR	Satisfied/Term	
Phys	0150	Physics 1	4		
Math	0231	Analytic Geom & Calc 2	4		

Follow-Up Courses (RQ 3154)					
Subject	Number	Course Title	CR	Satisfied/Term	
Phys	0152	Physics 2	4		
Math	0241	Analytic Geom & Calc 3	4		

Each student must take 2 courses in each World of Knowledge. The two courses taken within each World must be from different subjects. A student must take two additional "Follow-Up" courses from any World.

>The minimum number of courses taken in the Worlds must be 10.

>The Follow-Up courses may repeat a subject previously taken in a World.

>A student cannot use a major required Subject course in one of the Worlds.

>For example: A Biology student cannot use BIOL 0110 to fulfill a requirement in the Science and Nature World.

>Students cannot use a course to count both in their QR requirement and one of the Worlds.

>Students can choose QR and Worlds of Knowledge courses from published course lists.

MAJOR REQUIREMENTS (RG 287)

Required Chemistry Courses (RQ 3542)		CR	Satisfied/Term	
Chem 0111	General Chemistry 1	3		
Chem 0112	General Chemistry 2	3		
Chem 0113	General Chemistry 1 Lab	1		
Chem 0114	General Chemistry 2 Lab	1		
Chem 0231	Organic Chemistry 1	3		
Chem 0232	Organic Chemistry 2	3		
Chem 0233	Organic Chemistry 1 Lab	1		
Chem 0234	Organic Chemistry 2 Lab	1		
Chem 0325	Analytical Chemistry	4		
Chem 1131	Inorganic Chemistry	3		
Chem 1133	Synthesis & Characterization	1		
Chem 1321	Biochemistry			
or Chem 1324	Fund of Biochemistry	3		
Chem 1327	Instrumental Analysis	4		
Chem 1341	Physical Chemistry 1	3		
Chem 1342	Physical Chemistry 2	3		
Chem 1344	Physical Chemistry Lab	1		
Requirement Satisfied		**38**		

Required Math Courses (RQ 3543)		CR	Satisfied/Term	
Math 0221	Analytic Geom & Calc 1	4		
Math 0231	Analytic Geom & Calc 2	4		
Math 0241	Analytic Geom & Calc 3	4		
Requirement Satisfied		**12**		

Required Physics Courses (RQ 3544)		CR	Satisfied/Term	
Phys 0150	Physics 1	4		
Phys 0151	Physics 1 Lab	1		
Phys 0152	Physics 2	4		
Phys 0153	Physics 2 Lab	1		
Requirement Satisfied		**10**		

Chemistry Electives (RQ 851)				
Select 9 credits from the following		**CR**	Satisfied/Term	
Chem 1322	Biochemistry 2	3		
Chem 1323	Biochemistry Lab	1		
Chem 1331	Polymer Chemistry	3		
Chem 1332	Medicinal Chemistry	3		
Chem 1351	Green Chem & Sustainability	3		
Chem 1360#	Independent Study	4		
Chem 1371#	Undergraduate Research	4		
Phys 0225	Optics	1		
Requirement Satisfied		**9**		

NOTE: # Only 4 credits of Independent Study and/or Undergraduate Research may be used as Chemistry Electives

MGPA (RQ 0852)
Major 50% (RQ 2876)

Reviewed 3/30/2026

IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.