

# Bachelor of Science in Chemistry -- 120 Credits

JCHEM-BS (RG 287)  
Effective August 2016

## GENERAL EDUCATION REQUIREMENTS

### REQUIRED COURSES (RG 6813)

Foundational Courses	CR	Satisfied/Term
Engcmp 0003 or 0005	3	
Engcmp 0004 or 0006	3	
CommRc 0052 Public Speaking	3	
<b>Basic Algebra or Placement Test</b>		
Math 0001 Algebra 1	3	
<b>Quantitative Reasoning (QR) - 1 Course</b>		
<i>Note - a student cannot test out of their QR requirement.</i>		
	3	

### 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	

### 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

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)

(RQ 3542)

Required Chemistry Courses	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 1327 Instrumental Analysis	4	
Chem 1341 Physical Chemistry 1	3	
Chem 1342 Physical Chemistry 2	3	
Chem 1343 Physical Chemistry Lab	2	
<b>Requirement Satisfied</b>	<b>35</b>	

(RQ 3543)

Required Math Courses	CR	Satisfied/Term
Math 0221 Analytic Geom & Calc 1	4	
Math 0231 Analytic Geom & Calc 2	4	
Math 0241 Analytic Geom & Calc 3	4	
<b>Requirement Satisfied</b>	<b>12</b>	

(RQ 3544)

Required Physics Courses	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	
<b>Requirement Satisfied</b>	<b>10</b>	

(RQ 851)

Chemistry Electives	CR	Satisfied/Term
<b>Select 12 credits from the following</b>		
Chem 1133 Synthesis & Characterization	1	
Chem 1321 Biochemistry 1	3	
Chem 1322 Biochemistry 2	3	
Chem 1323 Biochemistry Lab	1	
Chem 1325 Spectral Analysis	3	
Chem 1329 Chemical Separations	2	
Chem 1330 Topics in Organic Chem	3	
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	
<b>Requirement Satisfied</b>	<b>12</b>	

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

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

### 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.

Updated 2/20/20