



**Bachelor of Science in Chemistry (CHEM)**

**First Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
ARAB200	Arabic Language and Literature	3		
PHYS280	Electricity and Magnetism	3	MATH161 - MATH160	
CHEM200L	General Chemistry Lab	1	ENGL101 - CHEM160	CHEM200
ENGL201	Composition and Research Skills	3	ENGL151	
MATH210	Calculus II	3	MATH161 - MATH160	
CHEM200	General Chemistry	3	ENGL101 - CHEM160	CHEM200L
Total		16		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
CHEM260L	Analytical Chemistry Lab	1	CHEM200	CHEM260
CHEM260	Analytical Chemistry	3	CHEM200	CHEM260L
PHYS250	Thermodynamic and Waves	3	PHYS161 - MATH161 - ENGL051 - MATH160 - PHYS160	
CHEM250	Organic Chemistry I	3	ENGL051 - ENGL101 - CHEM200	
CSCI200	Introduction to Computers	3	ENGL051	
ENGL251	Communication Skills	3	ENGL201	
Total		16		

**Second Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
CHEM300	Organic Chemistry II	3	ENGL051 - ENGL101 - CHEM250	
CHEM300L	Organic Chemistry Lab	2	ENGL051 - ENGL101 - CHEM250	
CHEM310	Physical Chemistry I	3	CHEM200	CHEM310L
BMKT300	Marketing Theory and Principles	3		ENGL201
CHEM310L	Physical Chemistry I Lab	1	CHEM200	CHEM310
CHEM370	Inorganic Chemistry I	3	CHEM200	CHEM370L
CHEM370L	Inorganic Chemistry I Lab	1	CHEM200	CHEM370
Total		16		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
	Elective	3		
MATH270	Ordinary Differential Equations	3	MATH210	MATH225
CHEM430	Instrumental Chemistry	3	CHEM260	
CHEM350	Organic Chemistry III	3	CHEM300	CHEM350L
CHEM400	Inorganic Chemistry II	3	CHEM370	
CHEM350L	Organic Chemistry Lab III Lab	1		CHEM350
Total		16		

**Third Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
CHEM360	Physical Chemistry II	3	CHEM310	
CHEM410	Structure Determination of Compounds	3	CHEM300	
CHEM490	Modern Topics in Chemistry	2	CHEM310 - CHEM300	
	Elective	3		
CHEM465	Environmental Chemistry	3	CHEM300	
	Elective	3		
Total		17		

### Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
MATH245	Statistics for Health Sciences	3	ENGL051 - ENGL101 - ENGL151	
	Elective	3		
CULT200	Introduction to Arab - Islamic Civilization	3		
CHEM420	Industrial Chemistry	3	CHEM300 - CHEM310	
	Elective	3		
CHEM480	Senior Project in Chemistry	3	CHEM370 - CHEM350 - CHEM310	
Total		18		

### Major Elective Courses

Code	Title	Credits	Prerequisites	Corequisites
BIOC300	Biochemistry I (General)	4	CHEM250	
BMED450	Clinical Chemistry	3	BIOC300	
EDIT250	Educational Technology for Teachers	3	CSCI200	
FDSC370	Food Chemistry	3	CHEM250	
FDSC420	Food Processing	3	CHEM250	
MATH225	Linear Algebra with Applications	3	ENGL051 - MATH161	
MATH265	Introduction to Linear Algebra	3	MATH161 - MATH160	
MATH330	Partial Differential Equations	3	MATH270	
PHYS340	Modern Physics	3	PHYS250	