Chemistry

Bachelor of Arts with a Major in Chemistry

General Education		
Chemistry majors are required to take the following courses that may be used to help satisfy General Education requirements:		38
MATH 107	Precalculus	
or MATH 165	Calculus I	
PHYS 211	College Physics I	
PHYS 212	College Physics II	
Required Chemistry Courses		
CHEM 121	General Chemistry I	5
CHEM 122	General Chemistry II	5
CHEM 330	Quantitative Analysis	4
CHEM 341	Organic Chemistry I	5
CHEM 342	Organic Chemistry II	5
CHEM 360	Principles of Physical Chemistry	4
or CHEM 461	Physical Chemistry I	
CHEM 381	Fundamentals of Biochemistry	3
or CHEM 481	Biochemistry I	
300 and 400 level chemistry courses		**12**
Select at least 12 additional credits of 300 or 400 level CHEM courses		
Required Support Courses		
MATH 210	Elementary Statistics	4
or DATA 211	Applied Statistics and Data Visualization	
Minor/Concentration/Electives		
These should be chosen in consultation with your advisor to best prepare you for your career field.		35-36
Total Hours		**120-121**

Bachelor of Science with a Major in Professional Chemistry

General Education		
Chemistry majors are required to take the following courses which may be used to help satisfy General Education requirements:		38
MATH 165	Calculus I	
PHYS 251	University Physics I	
PHYS 252	University Physics II	
Required Chemistry Courses		
CHEM 121	General Chemistry I	5
CHEM 122	General Chemistry II	5
CHEM 330	Quantitative Analysis	4
CHEM 341	Organic Chemistry I	5
CHEM 342	Organic Chemistry II	5
CHEM 420	Inorganic Chemistry	3
CHEM 430	Instrumental Analysis	5
CHEM 461	Physical Chemistry I	4
CHEM 462	Physical Chemistry II	4
CHEM 481	Biochemistry I	3
CHEM 494	Directed Research in Chemistry	1-6
Select at least 4 credits from the following:		**4**
CHEM 436	Industrial Chemical Analysis and QA/QC	
CHEM 440	Organic Spectroscopy	
CHEM 442	Medicinal Chemistry	
CHEM 480L	Biochemistry Laboratory	

CHEM 482	Biochemistry II	
Required Support Courses		
BIOL 150	General Biology I	4
MATH 166	Calculus II	4
MATH 265	Calculus III	4
MATH 305	Linear Algebra	4
SCI 240	Research Methods	2
SCI 480	Seminar	3
MATH 210	Elementary Statistics	4
or DATA 211	Applied Statistics and Data Visualization	
Electives		0-7
Total Hours		**111-123**

Chemistry Minor (Teaching or Non-Teaching)

Option I		
CHEM 121	General Chemistry I	5
CHEM 122	General Chemistry II	5
CHEM 240	Fundamentals of Organic Chemistry	5
CHEM 330	Quantitative Analysis	4
CHEM 381	Fundamentals of Biochemistry	3
Select one of the following:		3-4
CHEM 360	Principles of Physical Chemistry	
CHEM 380	Environmental Chemistry	
CHEM 420	Inorganic Chemistry	
Total Hours		**25-26**

Option II		
CHEM 121	General Chemistry I	5
CHEM 122	General Chemistry II	5
CHEM 330	Quantitative Analysis	4
CHEM 341	Organic Chemistry I	5
CHEM 342	Organic Chemistry II	5
Select one of the following:		3-4
CHEM 360	Principles of Physical Chemistry	
CHEM 380	Environmental Chemistry	
CHEM 381	Fundamentals of Biochemistry	
CHEM 420	Inorganic Chemistry	
Total Hours		**27-28**

Chemistry Concentration

CHEM 121	General Chemistry I	5
CHEM 122	General Chemistry II	5
CHEM Electives at the 200 level or above		4
Total Hours		**14**