B.S. in Chemistry

(125 credits minimum)

First Year		
1st Semester		**Term Credits**
CHEM 125 or CHEM 121	General Chemistry I or Fundamentals of Chemical Principles I	3
CHEM 125A	General Chemistry Lab I	1
CS 113 or BNFO 135	Introduction to Computer Science or Programming for Bioinformatics	3
HUM 101	English Composition: Writing, Speaking, Thinking I	3
MATH 111	Calculus I	4
PHYS 111	Physics I	3
PHYS 111A	Physics I Laboratory	1
FRSH SEM	Freshman Seminar	0
	Term Credits	**18**
2nd Semester		
CHEM 126 or CHEM 122	General Chemistry II or Fundamentals of Chemical Principles II	3
CHEM 126A	Gen Chemistry Lab II	1
MATH 112	Calculus II	4
PHYS 121	Physics II	3
PHYS 121A	Physics II Laboratory	1
HUM 102	English Composition: Writing, Speaking, Thinking II	3
Physical Education:GUR		1
	Term Credits	**16**
Second Year		
1st Semester		
CHEM 221	Analytical Chemical Methods	2
CHEM 222	Analytical Chemistry	3
CHEM 243	Organic Chemistry I	3
MATH 211	Calculus III A	3
English Composition and Cultural History (lower-level):GUR Elective		3
Physical Education:GUR		1
	Term Credits	**15**
2nd Semester		
CHEM 231	Physical Chemistry I	3
CHEM 244	Organic Chemistry II	3
CHEM 244A	Organic Chemistry II Laboratory	2
EPS 202	Society, Technology, and the Environment	3
Free Elective		3
Technical Elective		3
	Term Credits	**17**
Third Year		
1st Semester		
CHEM 235	Physical Chemistry II	3
ECON 201	Economics	3
Humanities and Social Sciences (upper-level) GUR Elective		3
Technical Elective		3
Technical Elective		3
	Term Credits	**15**

2nd Semester		
CHEM 340	Chemistry and Engineering of Materials	3
CHEM 336	Physical Chemistry III	3
CHEM 235A	Physical Chemistry II Laboratory	2
MATH 225	Survey of Probability and Statistics [1]	1
Open:GUR Elective		3
Technical Elective		3
	Term Credits	**15**
Fourth Year		
1st Semester		
CHEM 473	Biochemistry	3
CHEM 412 or R160 413	Inorganic Chemistry or Inorganic Chemistry	3
Technical Elective		3
Technical Elective		3
Technical Elective		3
	Term Credits	**15**
2nd Semester		
CHEM 480	Instrumental Analysis	2
Management:GUR Elective		3
Capstone Seminar GUR Elective		3
Technical Elective		3
Technical Elective		3
	Term Credits	**14**
	Total Credits	**125**

[1] Students must take a special section of MATH 225 Survey of Probability and Statistics for chemical engineering or chemistry majors, in conjunction with CHEM 235A Physical Chemistry II Laboratory

For a listing of GUR and Electives **click here**

This curriculum represents the maximum number of credits per semester for which a student is advised to register. A full-time credit load is 12 credits. First-year students are placed in a curriculum that positions them for success which may result in additional time needed to complete curriculum requirements. Continuing students should consult with their academic advisor to determine the appropriate credit load.

Department Regulations

For departmental regulations on prerequisites, grades and withdrawals, consult with the departmental undergraduate advisor. Students cannot receive a B.S. in Chemistry unless they achieve a minimum GPA of 2.0 in chemistry courses.