

Chemistry

Bachelor of Science Degree

I.	Course Requirements for Major		
A.	Program Requirements		38 semester hours
1.	#CHE 141	General Chemistry I	4
2.	CHE 142	General Chemistry II	4
3.	CHE 241	Organic Chemistry I	4
4.	CHE 242	Organic Chemistry II	4
5.	CHE 341	Physical Chemistry I	3
6.	CHE 342	Physical Chemistry II	3
7.	CHE 350	Analytical Chemistry	4
8.	CHE 351	Introduction to Computational Chemistry	1
9.	CHE 395	Junior Seminar I	1
10.	CHE 396	Junior Seminar II	1
11.	CHE 441	Physical-Instrumental Analysis	4
12.	CHE 495	Senior Seminar I	1
13.	CHE 496	Senior Seminar II	1
14.	CHE ____	Approved Chemistry Elective	3
B.	Cognate Requirements		22 semester hours
1.	#MAT 174	Data Analysis and Statistics	3
2.	MAT 181	Calculus with Analytic Geometry I	4
3.	MAT 182	Calculus with Analytic Geometry II	4
4.	PHY 161	Physics I (Calculus Based)	4
5.	PHY 162	Physics II (Calculus Based)	4
6.	TSC 101	Fundamentals of Speech Communication	3
C.	Total for Major		60 semester hours
II.	Liberal Arts		28 semester hours
	# May be double counted toward Major and Liberal Arts Requirements.		
III.	General Electives		32 semester hours
IV.	Total for Degree		120 semester hours
V.	Other Requirements		
1.	Students majoring in Chemistry must maintain a 2.1 GPA in all required courses (excluding cognate requirements in the major).		
2.	Chemistry majors must complete a 16 hour residency and 12 semester hours of Siena Heights chemistry courses at the 200-level or higher and the Junior and Senior seminar series (CHE 395/396/495/496).		
3.	Students seeking teacher certification must take CHE 454 Biochemistry as a required chemistry elective.		
4.	Students seeking secondary certification in teaching must also take NSC110 Earth Science.		
5.	Students seeking secondary certification must also complete the appropriate science methods course: BIO 372 (Secondary Science Methods) from the Professional Education Sequence.		

Minor in Chemistry

- I. Course Requirements for Minor
- A. Program Requirements 20 semester hours
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|----|----------|----------------------|---|
| 1. | #CHE 141 | General Chemistry I | 4 |
| 2. | CHE 142 | General Chemistry II | 4 |
| 3. | CHE 241 | Organic Chemistry I | 4 |
| 4. | CHE 242 | Organic Chemistry II | 4 |
| 5. | CHE ____ | Approved Elective | 4 |
- B. Total for Minor **b 20 semester hours**
 # May be double counted toward Minor and Liberal Arts Requirements.
- II. Other Requirements
1. Chemistry minors must complete 8 semester hours of Siena Heights chemistry courses at the 200-level or higher.
 2. Students minoring in Chemistry must earn a C/C- or better in each required course
 3. Students seeking teacher certification must take CHE 454 Biochemistry as their required chemistry elective.
 4. Students seeking secondary certification in teaching must also take NSC110 Earth Science.

Chemistry**Associate of Science Degree**

- I. Course Requirements for Major
- A. Program Requirements 20 semester hours
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|----|----------|----------------------|---|
| 1. | #CHE 141 | General Chemistry I | 4 |
| 2. | CHE 142 | General Chemistry II | 4 |
| 3. | CHE 241 | Organic Chemistry I | 4 |
| 4. | CHE 242 | Organic Chemistry II | 4 |
| 5. | CHE ____ | Approved Elective | 4 |
- B. Cognate Requirements 10-16 semester hours
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|----|-----------|--------------------|-----|
| 1. | #MAT ____ | Approved Electives | 6-8 |
| 2. | PHY ____ | Approved Electives | 4-8 |
- C. Total for Major **30-36 semester hours**
- II. Liberal Arts **13 semester hours**
 # May be double counted toward Major and Liberal Arts Requirements.
- III. General Electives **11-17 semester hours**
- IV. Total for Degree **60 semester hours**
- V. Other Requirements
1. Students majoring in Chemistry must maintain a 2.1 GPA in all required courses (excluding cognate requirements) in the major.