

CHEMISTRY MAJOR (2019 Catalog)  
Bachelor of Science Degree – ACS Certified  
 126 Semester Hours Minimum

Name \_\_\_\_\_

Campus Address \_\_\_\_\_ Phone \_\_\_\_\_

Second Major \_\_\_\_\_ Minor 1 \_\_\_\_\_ Minor 2 \_\_\_\_\_

Transferred \_\_\_\_\_ credits from \_\_\_\_\_ Advisor \_\_\_\_\_

**Chemistry Courses**

CHEM 1110	General Chemistry I	4	_____
CHEM 1120	General Chemistry II	4	_____
	OR		
CHEM 1130	Gen. Chemistry I-II	5	_____
CHEM 2110	Descriptive Inorg Chem	4	_____
CHEM 2210	Organic Chemistry I	3	_____
CHEM 2220	Organic Chemistry II	3	_____
CHEM 2230	Organic Chem. Lab	2	_____
CHEM 2310	Chromatog. and Quant.	4	_____
CHEM 4010	Chemical Safety	1	_____
CHEM 4310	Instrumental Analysis	4	_____
CHEM 4420	Physical Chemistry I	3	_____
CHEM 4430	Physical Chemistry II	3	_____
CHEM 4440	Physical Chem. Lab	2	_____
CHEM 4510	Biochemistry I	3	_____
CHEM 4110	Inorganic Chemistry	3	_____
CHEM 4610	Adv. Synthesis Lab	2	_____
CHEM3600	Undergraduate Research	2	_____

**Elective**

3000/4000 level Chemistry course 3 \_\_\_\_\_

**Math and Physics Courses**

MATH 1420	Calculus I	4	_____
MATH 1421	Calculus II	4	_____
PHYSICS 1701	Physics I	4	_____
PHYSICS 1702	Physics II	4	_____
	OR		
PHYSICS 1511	General Physics I	4	_____
PHYSICS 1512	General Physics II	4	_____

**Liberal Arts Core**

***Category I: Core Competencies (12 hrs)***

_____	A. Reading and Writing	3 hrs
_____	B. Speaking and Listening	3 hrs
<u>  x  </u>	C. Quantitative Techniques	3 hrs
	Satisfied by MATH 1420 4 hrs	
_____	D. Dimensions of Wellbeing	2 hrs

***Category 2: Civilizations and Cultures (9 hrs)***

_____	A. Humanities (take 2 of I, II, and III)	3 hrs
	_____	3 hrs
_____	B. Non-Western Cultures	3 hrs

***Category 3: Fine Arts, Literature, Philosophy and Religion (6 hrs)***

_____	A. Fine Arts	3 hrs
_____	B. Lit, Philosophy, or Religion	3 hrs

***Category 4: Natural Science and Technology (7 hrs)***

_____	A. Life Sciences	3 hrs
<u>  x  </u>	B. Physical Sciences	4 hrs
	Satisfied by CHEM 1110 or CHEM 1130	

***Category 5: Social Science (9 hrs)***

_____	A. Soc. & Historical Perspectives	3 hrs
_____	B. Individual & Institutional Perspectives	3 hrs
_____	C. Diversity & Global Issues	3 hrs

***Category 6: Capstone (2 hrs)***

\_\_\_\_\_ Capstone

**Total: 63-66 hours**

**7 hours satisfied  
 37 hours needed**

SAMPLE PLAN OF STUDY FOR THE B.S. MAJOR IN CHEMISTRY  
An average of 15.75 credits per semester is needed to graduate in 8 semesters

FRESHMAN YEAR

<u>FALL</u>			<u>SPRING</u>		
CHEM1110	General Chemistry I	4	CHEM 1120	General Chemistry II	4
MATH 1420	Calculus I	4	MATH 1421	Calculus II	4
	Liberal Arts	<u>6</u>		Liberal Arts	<u>6</u>
		14			14

SOPHOMORE YEAR

<u>FALL</u>			<u>SPRING</u>		
CHEM 2210	Organic Chemistry I	3	CHEM 2220	Organic Chemistry II	3
CHEM 2310	Chromatog. and Quant. Analysis	4	CHEM 2230	Organic Chemistry Laboratory	2
PHYSICS 1701	Physics I	4	CHEM 2110	Descriptive Inorganic Chemistry	4
	Liberal Arts	<u>6</u>	PHYSICS 1702	Physics II	4
		17		Liberal Arts/Electives	<u>3</u>
					16

JUNIOR YEAR

<u>FALL</u>			<u>SPRING</u>		
CHEM 4420	Physical Chemistry I	3	CHEM 4430	Physical Chemistry II	3
CHEM 4310	Instrumental Analysis	4	CHEM 4440	Physical Chemistry Laboratory	2
CHEM 4510	Biochemistry I	3	CHEM 4110	Inorganic Chemistry	3
	Liberal Arts/ Electives	<u>6</u>	CHEM 4010	Chemical Safety	1
		16		Liberal Arts/Electives	<u>7</u>
					16

SENIOR YEAR

<u>FALL</u>			<u>SPRING</u>		
CHEM 4610	Advanced Synthesis Laboratory	2	CHEM 3600	Undergraduate Research	1
CHEM 3600	Undergraduate Research	1	3000/4000 level	Chemistry Elective	3
	Liberal Arts/Electives	<u>14</u>		Liberal Arts/Electives	<u>12</u>
		17			16

	<u>Total Hours</u>
Liberal Arts	37 hours
Major	63-66 hours
University Electives/Minor	<u>23-26 hours</u>
	126 hours minimum

ADVISING NOTE: This is a sample plan of study only. There are a variety of alternative schedules for completing the B.S. Chemistry. Please consult with an advisor in the Department of Chemistry and Biochemistry to plan a schedule tailored for your needs.