

A Major Academic Plan (MAP) illustrates one way to complete a degree in a recommended number of semesters. Below is an example of an efficient and recommended plan, but actual plans will vary by individual student needs. Program requirements are based on Catalog Year. See page two for a detailed summary of Major, General Education, Elective, and university requirements.

Course Subject and Title	Cr.	Min. Grade	*GE, UU, UM	**Sem. Offered	Prerequisite	Co Requisite
Semester One						
GE Objective 1: ENGL 1101 English Composition	3	C-	GE	F,S,Su	Appropriate placement score	
GE Objective 3: Either MATH 1160 Applied Calculus OR 1170 Calculus I	3 or 4	C-	GE	F,S,Su	MATH 1143 or 1147 or appropriate test score MATH 1144 or 1147 or appropriate test score	
GE Objective 5: CHEM 1111 & 1111L Gen Chemistry I & Lab	5	C-	GE	F,S,Su	MATH 1143 or 1147 or appropriate test score	
GE Objective 4:	3		GE			
Total	14-15					
Semester Two						
GE Objective 1: ENGL 1102 Critical Reading and Writing	3	C-	GE	F,S,Su	ENGL 1101 or equivalent	
CHEM 1112 & 1112L General Chemistry II & Lab	4	C-		F,S,Su	CHEM 1111 & 1111L and MATH 1143 or 1147 or equivalent	
GE Objective: 6	3		GE			
Electives	5			F,S,Su	MATH 1108	
Total	15					
Semester Three						
GE Objective 2: COMM 1101 Principles of Speech	3		GE	F,S,Su		
GE Objective 5: Either PHYS 1111 & 1113 Gen Physics I & Lab OR PHYS 2211 & 2213 Engineering Physics I & Lab	4 or 5		GE	F F,S	MATH 1143 or 1147 or appropriate test score	MATH 1175
CHEM 3301 & CHEM 3303 Organic Chemistry I & Lab	4	C-	UM	F	CHEM 1112 & 1112L or permission of instructor	
GE Objective 4:	3		GE	F,S,Su		
Elective	0 or 1					
Total	15					
Semester Four						
GE Objective 7 or 8:	3		GE			
Either PHYS 1112 & PHYS 1114 General Physics II & Lab OR PHYS 2212 & PHYS 2214 Engineering Physics II & Lab	4 or 5			S F,S	PHYS 1111 & PHYS 1113 Or PHYS 2211 & PHYS 2213	
CHEM 3302 & CHEM 3304 Organic Chemistry II & Lab	4	C-	UM	S	CHEM 3301 & CHEM 3303	
CHEM 2232 & CHEM 2234 Qualitative Analysis & Lab	4			S	CHEM 1112 & Lab, MATH 1160 or MATH 1170	
Elective	0 or 1					
Total	16					
Semester Five						
Either BIOL 4432 Biochemistry OR CHEM/BIOL 4445 Biochemistry I	3		UM		BIOL 1101 & 1101L and CHEM 3301 BIOL 1101 and 1101L and CHEM 3302	
Either CHEM 3341 Topics in Physical Chemistry Or CHEM 3351 Physical Chemistry	3		UM		CHEM 1112 & 1112L, MATH 1160 or 1170, PHYS 1112 or 2212 CHEM 1112 & 1112L, MATH 1175, PHYS 1112 or 2212	
CHEM 2211 & CHEM 2213 Inorganic Chemistry I & Lab	4			F	CHEM 3301 or permission of instructor	
Upper Division CHEM elective	3		UM	F		
GE Objective 6:	3		GE			
Total	16					
Semester Six						
Either CHEM 3342 Topics in Physical Chemistry OR CHEM 3352 Physical Chemistry	3		UM	S S	CHEM 3341 or permission of instructor CHEM 3351	
Upper Division CHEM Elective	3		UM	S	See catalog	
GE Objective 9:	3		GE			
Electives	6					
Total	15					
Semester Seven						
CHEM 3391 Seminar	1		UM	R1	CHEM 3301, 3303 or permission of instructor	
Upper division CHEM Electives	2		UM		See catalog	
Upper Division Elective	3		UU			
Upper Division Elective	4		UU			
Electives	5					
Total	15					
Semester Eight						
Upper Division Elective	3		UU		See catalog	
Electives	11					
Total	14					

*GE=General Education Objective, UU=Upper Division University, UM= Upper Division Major

**See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.)

2017-2018 Major Requirements	CR	2017-2018 GENERAL EDUCATION OBJECTIVES Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9	36 cr. min
MAJOR REQUIREMENTS	43 or 44	1. Written English (6 cr. min) ENGL 1101	3
		ENGL 1102	3
MATH 1160 App Calculus OR 1170 Calc I (3 or 4 cr counted in GE Objective 3)		2. Spoken English (3 cr. min) COMM 1101	3
		3. Mathematics (3 cr. min) MATH 1160 or MATH 1170	3 or 4
CHEM 1111 & 1111L General Chemistry I & Lab (5 cr counted in Objective 5)		4. Humanities, Fine Arts, Foreign Lang. (2 courses; 2 categories; 6 cr. min)	
CHEM 1112 & 1112L General Chemistry II & Lab	4		
CHEM 2211 & CHEM 2213 Inorganic Chemistry I & Lab	4		
CHEM 2232 & CHEM 2234 Qualitative Analysis & Lab	4	5. Natural Sciences (2 lectures-different course prefixes, 1 lab; 7 cr. min)	
CHEM 3301 & CHEM 3303 Organic Chemistry I & Lab	4	CHEM 1111 & CHEM 1111L	5
CHEM 3302 & CHEM 3304 Organic Chemistry II & Lab	4	Either PHYS 1111 & 1113 OR PHYS 2211 & 2213	4 or 5
Either CHEM 3341 Topics in Physical Chemistry			
OR CHEM 3351 Physical Chemistry	3	6. Behavioral and Social Science (2 courses-different prefixes; 6 cr. min)	
Either CHEM 3342 Topics in Physical Chemistry			
OR CHEM 3352 Physical Chemistry	3		
CHEM 3391 Seminar	1	One Course from EITHER Objective 7 OR 8 (1course; 3 cr. min)	
Upper Division CHEM Electives	8	7. Critical Thinking	
		8. Information Literacy	
Either BIOL 4432 Biochemistry		9. Cultural Diversity (1 course; 3 cr. min)	
OR CHEM/Biol 4445 Biochemistry I	3		
		General Education Elective to reach 36 cr. min. (if necessary)	
Either PHYS 1111 & PHYS 1113 General Physics I & Lab			
OR PHYS 2211 & PHYS 2214 Engineering Physics I & Lab (counted in GE)		Total GE	39 or 41
Either PHYS 1112 & PHYS 1114 General Physics II & Lab			
OR PHYS 2212 & PHYS 2214 Engineering Physics II & Lab	4 or 5		
		MAP Credit Summary	CR
		Major	43 or 44
		General Education	39 to 41
		Free Electives to reach 120 credits	35 to 38
		TOTAL	
		Graduation Requirement Minimum Credit Checklist	Confirmed
		Minimum 36 cr. General Education Objectives (15 cr. AAS)	Yes
		Minimum 16 cr. Upper Division in Major (0 cr. Associate)	Yes
		Minimum 36 cr. Upper Division Overall (0 cr. Associate)	Yes
		Minimum of 120 cr. Total (60 cr. Associate)	Yes
Advising Notes		MAP Completion Status (for internal use only)	
Please consult catalog and faculty advisor for appropriate CHEM electives.			Date
Courses in chemistry which are prerequisites for another course must be passed with a C- or better.		Department:	4/27/2017
		CAA or COT:	5.2.2017 sfjh
(Biology 1101 and 1101L recommended for Biochemistry prerequisite)		Registrar:	