

# ACADEMIC MAP

## Chemistry General Concentration Chemistry, Bachelor of Science



First Year			Third Year		
<b>Fall</b>			<b>Fall</b>		
UNIV 1101	University Seminar I	1	CHEM 4401	Biochemistry I	4
CHEM 1411	General Chemistry I	4	POLS 2306	State and Local Government	3
ENGL 1301	Writing and Rhetoric I	3	CHEM 4407	Advanced Inorganic Chemistry	4
HIST 1301	U.S. History to 1865	3	CHEM 3418	Instrumental Analysis	4
Biology, Geology, or Environmental Science Course		4	<b>Hours</b>		<b>15</b>
<b>Hours</b>		<b>15</b>	<b>Spring</b>		
<b>Spring</b>			CHEM 4402	Biochemistry II	4
UNIV 1102	University Seminar II	1	CHEM 3417	Quantitative Analysis	4
CHEM 1412	General Chemistry II	4	General Chemistry Elective		4
MATH 2413	Calculus I	4	General Chemistry Elective		4
ENGL 1302	Writing and Rhetoric II	3	<b>Hours</b>		<b>16</b>
HIST 1302	U.S. History Since 1865	3	<b>Fourth Year</b>		
<b>Hours</b>		<b>15</b>	<b>Fall</b>		
<b>Second Year</b>			CHEM 4423	Physical Chemistry I	4
<b>Fall</b>			Social and Behavioral Sciences Core Requirement		
CHEM 3411	Organic Chemistry I	4	General Chemistry Elective		
PHYS 2425	University Physics I	4	Elective to meet 120		
MATH 2414	Calculus II	4	<b>Hours</b>		<b>13</b>
Biology, Geology, or Environmental Science Course		4	<b>Spring</b>		
<b>Hours</b>		<b>16</b>	CHEM 4424	Physical Chemistry II	4
<b>Spring</b>			CHEM 4292	Senior Chemistry Seminar	2
CHEM 3412	Organic Chemistry II	4	CHEM 4085	Major Field Test in Chemistry	0
PHYS 2426	University Physics II	4	General Chemistry Elective		3
POLS 2305	U.S. Government and Politics	3	Creative Arts Core Requirement		3
MATH 2415	Calculus III	4	<b>Hours</b>		<b>12</b>
Language, Philosophy & Culture Core Requirement		3	<b>Total Hours</b>		
<b>Hours</b>		<b>18</b>	<b>120</b>		



# CAREER MAP

## CHEMISTRY-GENERAL

### *Bachelor of Science*



The chemistry faculty seeks to provide a high-quality educational experience for students majoring in chemistry in preparation for industrial or government positions, for graduate study, and for entry to medical or dental schools. The program is also designed for those planning to teach chemistry or physics at the 7-12 level, or who need chemical knowledge and skills relevant to future studies in the sciences.

The student who wishes to obtain a Bachelor of Science Degree in Chemistry may do so by following one of the four curriculum plans referred to as Concentrations. The options include general, environmental, biochemistry, and physical science education concentrations. Students who are pre-medical, pre-dental, pre-optometry, pre-pharmacy, or pre-veterinary medicine may follow the biochemistry concentration. In addition, the biochemistry concentration offers an option which would allow students to pursue certification in clinical chemistry while obtaining their Bachelor's in Chemistry.

## CONTACT INFORMATION

### Career Counselor:

Career and Professional Development Center  
UC 304 | 361.825.2628  
career.center@tamucc.edu

### Internship Coordinator:

Dr. Fereshteh Billiot  
CS 207 | 361.825.6067  
fereshteh.billiot@tamucc.edu

### Department Contact:

Department of Physical and Environmental Sciences  
CS 130D | 361.825.2857  
mark.olson@tamucc.edu

## ADDITIONAL SOURCES OF INFORMATION

1. American Chemical Society
2. American Institute of Chemical Engineers
3. American Society of Biochemistry and Molecular Biology

## STUDENT ORGANIZATIONS

- Chemistry Club
- SACNAS Chapter at Texas A&M University - Corpus Christi
- Student Council of Math and Science Teachers

## ADDITIONAL PROGRAM REQUIREMENT

Every candidate for the BS in Chemistry following the general, environmental, or biochemistry concentration must complete the CHEM 4085 Major Field Test in Chemistry (O sch) during their senior year, prior to graduation.

## CAREER OPTIONS

• Academic Researcher	• Clinical Scientist/Biochemist
• Analytical Chemist	• Forensic Scientist
• Biotechnologist	• Nanotechnologist
• Chemical Engineer	• Pharmacologist
• Secondary education: (Chemistry Teacher, Physics Teacher)	• Professional School (Medical school, dental school, pharmacy school, optometry, veterinarian school, chiropractic school, etc.)

## SKILLS/ATTRIBUTES

- Critical Thinking/Problem Solving
- Teamwork/Collaboration
- Professionalism/Work Ethic
- Oral/Written Communication
- Leadership
- Digital Technology
- Career Management
- Global/Multicultural Fluency
- Math