

ACADEMIC MAP

CHEMISTRY-BIOCHEMISTRY/PREPROFESSIONAL CONCENTRATION

Bachelor of Science



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1

SEMESTER 1 - FALL	CREDITS	COMPLETED
UNIV 1101 UNIVERSITY SEMINAR I	1	✓
CHEM 1411 GENERAL CHEMISTRY I	4	
ENGL 1301 WRITING AND RHETORIC I	3	
HIST 1301 U.S. HISTORY TO 1865	3	
BIOL 1406 BIOLOGY I	4	

TOTAL CREDITS: 15

2

SEMESTER 2 - SPRING	CREDITS	COMPLETED
UNIV 1102 UNIVERSITY SEMINAR II	1	
CHEM 1412 GENERAL CHEMISTRY II	4	
MATH 1442 STATISTICS FOR LIFE	4	
ENGL 1302 WRITING AND RHETORIC II	3	
BIOL 1407 BIOLOGY II	4	

TOTAL CREDITS: 16

YEAR 1

3

SEMESTER 3 - FALL	CREDITS	COMPLETED
CHEM 3411 ORGANIC CHEMISTRY I	4	
PHYS 1401 OR PHYS 2425 GENERAL PHYSICS I OR UNIVERSITY PHYSICS I	4	
MATH 2413 CALCULUS I	4	
LANGUAGE, PHILOSOPHY & CULTURE CORE REQUIREMENT	3	

TOTAL CREDITS: 15

4

SEMESTER 4 - SPRING	CREDITS	COMPLETED
CHEM 3412 ORGANIC CHEMISTRY II	4	
PHYS 1402 OR PHYS 2426 GENERAL PHYSICS II OR UNIVERSITY PHYSICS II	4	
HIST 1302 U.S. HISTORY SINCE 1865	3	
MATH 2414 CALCULUS II	4	

TOTAL CREDITS: 15

YEAR 2

5

SEMESTER 5 - FALL	CREDITS	COMPLETED
CHEM 4401 BIOCHEMISTRY I	4	
POLS 2306 STATE AND LOCAL GOVERNMENT	3	
BIOL 2421 MICROBIOLOGY	4	
CHEM 3418 INSTRUMENTAL ANALYSIS	4	

TOTAL CREDITS: 15

6

SEMESTER 6 - SPRING	CREDITS	COMPLETED
CHEM 4402 BIOCHEMISTRY II	4	
CHEM 3417 QUANTITATIVE ANALYSIS	4	
UPPER DIVISIONAL ELECTIVE	3	
BIOL 2416 GENETICS	4	

TOTAL CREDITS: 15

YEAR 3

7

SEMESTER 7 - FALL	CREDITS	COMPLETED
CHEM 4423 PHYSICAL CHEMISTRY I	4	
SOCIAL AND BEHAVIORAL SCIENCES	3	
POLS 2305 U.S. GOVERNMENT AND POLITICS	3	
BIOCHEMISTRY-RELATED COURSES	3	
CHEM 4292 SENIOR CHEMISTRY SEMINAR	2	

TOTAL CREDITS: 15

8

SEMESTER 8 - SPRING	CREDITS	COMPLETED
CHEM 4424 PHYSICAL CHEMISTRY II	4	
UPPER DIVISIONAL ELECTIVE	3	
UPPER DIVISIONAL ELECTIVE	3	
CREATIVE ARTS CORE REQUIREMENT	3	
BIOCHEMISTRY-RELATED COURSES	3	
CHEM 4085 MAJOR FIELD TEST IN CHEMISTRY	0	

TOTAL CREDITS: 16

YEAR 4

This is not an official degree plan. It is a guideline for planning your courses. To access a copy of this academic map please visit tamucc.edu/academics/planning/academic-advising/

122 CREDITS | FINISHED!



CAREER MAP

CHEMISTRY-BIOCHEMISTRY/PREPROFESSIONAL CONCENTRATION

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