

CHEMISTRY - BIOCHEMISTRY, B.S. - CERTIFIED BY THE AMERICAN CHEMICAL SOCIETY - MINOR IN BIOLOGY

Course	Title	Semester	Credit Hours
Freshman Year			
Semester 1			
BIOL 1306 & BIOL 1106	General Biology I and General Biology Laboratory I	4	
CHEM 1311 & CHEM 1111	Gen Inorganic Chemistry I and Gen Inorganic Chem Lab I	4	
ENGL 1301	Rhetoric and Composition	3	
MATH 2413	Calculus I	4	
UNIV 1101	Learning in Global Context I	1	
Semester Credit Hours			16
Semester 2			
CHEM 1312 & CHEM 1112	Gen Inorganic Chemistry II and Gen Inorganic Chem Lab II	4	
ENGL 1302	Rhetoric and Composition	3	
MATH 2414	Calculus II	4	
UNIV 1102	Learning in Global Context II	1	
Communications (https://catalog.tamuk.edu/undergraduate/ general-requirements-graduation-baccalaureate-degree/ #communication)		3	
Semester Credit Hours			15
Sophomore Year			
Semester 1			
BIOL 1307 & BIOL 1107	General Biology II and General Biology Laboratory II	4	
CHEM 3323 & CHEM 3123	Organic Chemistry I and Organic Chemistry Lab I	4	
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4	
POLS 2301	Government and Politics of US	3	
Semester Credit Hours			15
Semester 2			
CHEM 3181	Chemical Literature	1	
CHEM 3325 & CHEM 3125	Organic Chemistry II and Organic Chemistry Lab II	4	
HIST 1301	American History to 1877	3	
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4	
POLS 2302	Government and Politics of TX	3	
Semester Credit Hours			15
Junior Year			
Semester 1			
CHEM 2401	Inorg Quantitative Analysis	4	
CHEM 3331	Physical Chemistry I	3	

CHEM 4341	Biochemistry I	3
HIST 1302	American History since 1877	3
Lang/Phil/Culture (https://catalog.tamuk.edu/undergraduate/ general-requirements-graduation-baccalaureate-degree/ #language)		3
Semester Credit Hours		16
Semester 2		
BIOL 2421	Elementary Microbiology	4
CHEM 3332	Physical Chemistry II	3
CHEM 4342	Biochemistry II	3
STAT 4301	Biostatistics	3
Semester Credit Hours		13
Senior Year		
Semester 1		
BIOL 3402	Genetics	4
CHEM 4131	Physical Chem Measurements	1
CHEM 4311	Advance Inorganic Chemistry	3
CHEM 4381	Selected Topics in Chemistry	1
Creative arts (https://catalog.tamuk.edu/undergraduate/ general-requirements-graduation-baccalaureate-degree/ #creative)		3
Social/Behavioral (https://catalog.tamuk.edu/undergraduate/ general-requirements-graduation-baccalaureate-degree/ #social)		3
Semester Credit Hours		15
Semester 2		
BIOL 4426	Cellular Physiology	4
CHEM 4132	Physical Chem Measurements	1
CHEM 4181	Chemical Seminar	1
CHEM 4401	Mod Meth of Instrumental Anal	4
Elective, adv. ¹		5
Semester Credit Hours		15
Total Credit Hours Required:		120

¹ This program qualifies a graduate for certification to the American Chemical Society as a chemist meeting the professional standards of that organization. Consult departmental chair for information on minor programs.

Advanced electives: Students must select at least five hours of advanced Chemistry electives. Please note: CHEM 3385 and CHEM 4385 are variable-hour, WI courses that are both suitable for electives.