

BACHELOR OF SCIENCE IN BIOCHEMISTRY (AMERICAN CHEMICAL SOCIETY CERTIFICATION)

Web Site: <https://twu.edu/chemistry-biochemistry/undergraduate-programs/bs-in-biochemistry-with-an-ac-s-certification/>

Recommended Plan of Study

First Year

Fall		TCCN	SCHs
CHEM 1001	Horizons of Chemistry and Biochemistry I: Career Possibilities		1
CHEM 1213 & CHEM 1211	Principles of Chemistry I and Principles of Chemistry Laboratory I		4
MATH 2014	Calculus I	MATH 2413	4
BIOL 1113 & BIOL 1111	Principles of Biology I and Principles of Biology I Laboratory	BIOL 1406 & BIOL 1106	4
UNIV 1231	Learning Frameworks: The First Year Experience	EDUC 1100, EDUC 1200, EDUC 1300	1
Wellness CAO Core			2
SCHs			16

Spring		TCCN	SCHs
CHEM 1101	Horizons of Chemistry and Biochemistry II: Current Applications		1
CHEM 1223 & CHEM 1221	Principles of Chemistry II and Principles of Chemistry Laboratory II		4
MATH 2024	Calculus II	MATH 2414	4
BIOL 1123 & BIOL 1121	Principles of Biology II and Principles of Biology II Laboratory	BIOL 1407 & BIOL 1107	4
Multicultural Women's Studies CAO Core			3
SCHs			16

Second Year

Fall		TCCN	SCHs
CHEM 2213 & CHEM 2211	Organic Chemistry I and Organic Chemistry Laboratory I	CHEM 2323 & CHEM 2123	4
PHYS 2153 & PHYS 2151	General Physics I and General Physics Laboratory I	PHYS 2325 & PHYS 2125	4
ENG 1013	Composition I	ENGL 1301	3
POLS 2013	U.S. National Government	GOVT 2305	3
SCHs			14

Spring		TCCN	SCHs
CHEM 3223 & CHEM 3221	Organic Chemistry II and Organic Chemistry Laboratory II		4
PHYS 2163 & PHYS 2161	General Physics II and General Physics Laboratory II	PHYS 2326 & PHYS 2126	4
ENG 1023	Composition II	ENGL 1302	3

CHEM 3333 & CHEM 3331	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory		4
SCHs			15

Third Year

Fall		TCCN	SCHs
CHEM 3413 & CHEM 3411	Physical Chemistry I and Physical Chemistry Laboratory I		4
CHEM 3633 & CHEM 3632	Biochemistry I and Biochemistry I Laboratory		5
CHEM 4513 & CHEM 4511	Inorganic Chemistry and Inorganic Chemistry Laboratory		4
CHEM 4981	Undergraduate Research		1
SCHs			14

Spring		TCCN	SCHs
CHEM 3423 & CHEM 3421	Physical Chemistry II and Physical Chemistry Laboratory II		4
CHEM 3643	Biochemistry II		3
HIST 1013	History of the United States, 1492-1865	HIST 1301	3
CHEM 3713 & CHEM 3711	Environmental Chemistry I and Environmental Chemistry Laboratory I		4
CHEM 4981	Undergraduate Research		1
SCHs			15

Fourth Year

Fall		TCCN	SCHs
CHEM 4983	Undergraduate Research		3
Creative Arts Core			3
HIST 1023	History of the United States, 1865 to the Present	HIST 1302	3
POLS 2023	Texas Government	GOVT 2306	3
CHEM 4313 & CHEM 4311	Instrumental Analysis and Instrumental Analysis Laboratory		4
SCHs			16

Spring		TCCN	SCHs
CHEM 4001	Research Presentations in Chemistry and Biochemistry		1
CHEM 4991	Senior Thesis		1
Language, Philosophy, and Culture Core			3
Social & Behavioral Science Core			3
Elective			3
Elective			3
SCHs			14

Total SCHs: 120