# ACCELERATED BACHELOR OF SCIENCE IN BIOCHEMISTRY/ MASTER OF SCIENCE IN CHEMISTRY

## **Degree Requirements**

Total Semester Credit Hours (SCH): 120

Major: 34 SCH

Program Code: BIOCHEM.BS.ACC; CIP Code: 26.0202.00

#### **Texas Core Curriculum**

Code	Title	SCHs
ENG 1013	Composition I (10)	3
ENG 1023	Composition II (10)	3
Mathematics (20)		
Life & Physical Sciences (30)		
Language, Philosophy, & Culture (40)		3
Creative Arts (50)		3
HIST 1013	History of the United States, 1492-1865 (60)	3
HIST 1023	History of the United States, 1865 to the Present (60)	3
POLS 2013	U.S. National Government (70)	3
POLS 2023	Texas Government (70)	3
Social & Behavioral Sciences (80)		3
CAO: Multicultural-Women's Studies (90)		3
CAO: First Year Seminar, Wellness or Mathematics (91)		3
Total SCHs		42

#### **Courses Required for Major**

Code	Title	SCHs
CHEM 1001	Horizons of Chemistry and Biochemistry I: Career Possibilities	1
CHEM 1101	Horizons of Chemistry and Biochemistry II: Current Applications	1
CHEM 1213 & CHEM 1211	Principles of Chemistry I and Principles of Chemistry Laboratory I	4
CHEM 1223 & CHEM 1221	Principles of Chemistry II and Principles of Chemistry Laboratory II	4
CHEM 2213 & CHEM 2211	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 3223 & CHEM 3221	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 3313	Physical Chemistry for the Life Sciences	3
CHEM 3333 & CHEM 3331	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory	4
CHEM 3633 & CHEM 3632	Biochemistry I and Biochemistry I Laboratory	5
CHEM 3643	Biochemistry II	3

Total SCHs		34
	Biochemistry	
CHEM 4001	Research Presentations in Chemistry and	1

### **Departmental Requirements**

Total SCHs		28
Upper Level BIOL/B	4	
BIOL 1123 & BIOL 1121	Principles of Biology II and Principles of Biology II Laboratory	4
BIOL 1113 & BIOL 1111	Principles of Biology I and Principles of Biology I Laboratory	4
PHYS 2163 & PHYS 2161	General Physics II and General Physics Laboratory II	4
PHYS 2153 & PHYS 2151	General Physics I and General Physics Laboratory I	4
MATH 2024 or MATH 4013	Calculus II Probability and Statistics	4
MATH 2014	Calculus I	4
Code	Title	SCHs

#### **Electives (Choose 16 SCH not already taken)**

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Code	Title	SCHs
CHEM 3713	Environmental Chemistry I	4
& CHEM 3711	and Environmental Chemistry Laboratory I	
CHEM 4313	Instrumental Analysis	3
CHEM 5323	Advanced Analytical Chemistry	3
CHEM 4511	Inorganic Chemistry Laboratory	1
CHEM 5523	Advanced Inorganic Chemistry	3
CHEM 4981	Undergraduate Research	1
CHEM 4983	Undergraduate Research	3
BACT 3113	General Microbiology	4
& BACT 3111	and General Microbiology Laboratory	
BIOL 4223	Ecology	4
& BIOL 4221	and Ecology Laboratory	
BIOL 4813	Molecular and Cellular Biology: Gene	4
& BIOL 4811	Expression	
	and Molecular and Cellular Biology: Gene	
	Expression Laboratory	
CHEM 5013	Advanced Physical Chemistry	3
CHEM 5213	Advanced Organic Chemistry	3
CHEM 5903	Special Topics (Advanced Biochemistry Pre-	3
	Requisite 3643)	
CHEM 5903	Special Topics	3