# ACCELERATED BACHELOR OF SCIENCE IN BIOCHEMISTRY (ACS)/MASTER OF SCIENCE IN CHEMISTRY

## **Degree Requirements**

Total Semester Credit Hours (SCH): 120

Major: 51 SCH

Program Code: BIOCHEM.BS.ACS.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)		3
Life & Physical Sciences (30)		
Language, Philosophy, & Culture (40)		
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)		
Total SCHs		

#### **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 3413 & CHEM 3411	Physical Chemistry I and Physical Chemistry Laboratory I	4
CHEM 3423 & CHEM 3421	Physical Chemistry II and Physical Chemistry Laboratory II	4
CHEM 3333 & CHEM 3331	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory	4

Total SCHs		51
CHEM 4991	Senior Thesis	1
CHEM 4983	Undergraduate Research	3
CHEM 5523	Advanced Inorganic Chemistry	3
CHEM 4511	Inorganic Chemistry Laboratory	1
CHEM 5323	Advanced Analytical Chemistry	3
CHEM 4311	Instrumental Analysis Laboratory	1
CHEM 4001	Research Presentations in Chemistry and Biochemistry	1
CHEM 3643	Biochemistry II	3
CHEM 3633 & CHEM 3632	Biochemistry I and Biochemistry I Laboratory	5

### **Departmental Requirements**

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

#### **Electives (Choose 3 SCH not already taken)**

Code	Title	SCHs
CHEM 3713 & CHEM 3711	Environmental Chemistry I and Environmental Chemistry Laboratory I	4
CHEM 4981	Undergraduate Research	1
BACT 3113 & BACT 3111	General Microbiology and General Microbiology Laboratory	4
BIOL 4223 & BIOL 4221	Ecology and Ecology Laboratory	4
BIOL 4813 & BIOL 4811	Molecular and Cellular Biology: Gene Expression and Molecular and Cellular Biology: Gene Expression Laboratory	4
BIOL 4823 & BIOL 4821	Molecular and Cellular Biology: Genetics and Inheritance and Molecular and Cellular Biology: Genetics and Inheritance Laboratory	4
CHEM 5013	Advanced Physical Chemistry	3
CHEM 5213	Advanced Organic Chemistry	3
CHEM 5613	Advanced Biochemistry I	3
CHEM 5903	Special Topics	3