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

## **Degree Requirements**

Total Semester Credit Hours (SCH): 120

Major: 55 SCH

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

#### **Texas Core Curriculum**

Code	Title	SCHs
ENG 1013	Composition I	3
ENG 1023	Composition II	3
Mathematics		3
Life & Physical Sciences		
Language, Philosophy, & Culture		
Creative Arts		3
HIST 1013	History of the United States, 1492-1865	3
HIST 1023	History of the United States, 1865 to the Present	3
POLS 2013	U.S. National Government	3
POLS 2023	Texas Government	3
Social & Behavioral Sciences		3
CAO: Women's Studies		
CAO: First Year Seminar, Wellness or Mathematics		
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 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		55
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 3713 & CHEM 3711	Environmental Chemistry I and Environmental Chemistry Laboratory I	4
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
Total SCHs		16

#### **Electives**

Code	Title	SCHs
Choose 7 SCH not already taken		
CHEM 3643	Biochemistry II	
CHEM 4983	Undergraduate Research	
CHEM 4913	Independent Study	
MATH 3063	Linear Algebra	
MATH 3073	Matrix Methods	
MATH 3104	Calculus III	
MATH 3123	Differential Equations	
MATH 4013	Probability and Statistics	
CHEM 5013	Advanced Physical Chemistry	
CHEM 5213	Advanced Organic Chemistry	
CHEM 5613	Advanced Biochemistry I	
CHEM 5903	Special Topics	
Total SCHs		7