

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

Degree Requirements

Total Semester Credit Hours (SCH): 120

Major: 34 SCH

Program Code: RO PLEASE ADD CIP Code: 26.0202.00

Texas Core Curriculum

Texas Core Curriculum

| Code | Title | SCHs |
|--|---|------|
| ENG 1013 | Composition I | 3 |
| ENG 1023 | Composition II | 3 |
| Mathematics | | 3 |
| Life & Physical Sciences | | 6 |
| Language, Philosophy, & Culture | | 3 |
| 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 | | 3 |
| CAO: First Year Seminar, Wellness or Mathematics | | 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 |

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

Departmental Requirements

| Code | Title | SCHs |
|----------------------------|--|------|
| MATH 2014 | Calculus I | 4 |
| MATH 2024 or MATH 4013 | Calculus II Probability and Statistics | 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 16 SCH not already taken)

| Code | Title | SCHs |
|-----------------------|--|------|
| CHEM 3713 & CHEM 3711 | Environmental Chemistry I and Environmental Chemistry Laboratory I | 4 |
| 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 & 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 |
| CHEM 5013 | Advanced Physical Chemistry | 3 |
| CHEM 5213 | Advanced Organic Chemistry | 3 |
| CHEM 5903 | Special Topics (Advanced Biochemistry Pre-Requisite 3643) | 3 |
| CHEM 5903 | Special Topics | 3 |