# CHEMISTRY (B.S.)

Degree: Bachelor of Science

Major: Chemistry

Total Hours: 120

| Code | Title | Hours |
|---|---|---|
| **General Education Core Curriculum** | | |
| *Communication* | | |
| ENGL 1301 | Composition I | 3 |
| Select one of the following: | | 3 |
| COMM 1315 | Public Speaking I | |
| COMM 1321 | Business and Prof Speech | |
| FREN 1311 | Beginning French I | |
| SPAN 1311 | Beginning Spanish I | |
| *Mathematics - 3 Hours* | | |
| MATH 2413 | Calculus I [1] | 4 |
| *Life and Physical Sciences* | | |
| Select six hours from the following: [1] | | 6 |
| BIOL 1406 | General Biology I (Majors) | |
| BIOL 1407 | General Biology II (Majors) | |
| GEOL 1403 | Geology I: Physical Geology | |
| GEOL 1404 | Geology II: Historical Geology | |
| *Language, Philosophy and Culture* | | |
| Select three hours from the following: | | 3 |
| DSDE 1374 | Introduction to Deaf Studies | |
| ENGL 2300 | Ethics and Literature | |
| ENGL 2322 | British Literature | |
| ENGL 2326 | American Literature | |
| ENGL 2331 | World Literature | |
| ENGL 2376 | African-American Literature | |
| FREN 2312 | Intermediate French II | |
| PHIL 1370 | Philosophy of Knowledge | |
| PHIL 2306 | Ethics | |
| SPAN 2312 | Intermediate Spanish II | |
| *Creative Arts* | | |
| Select three hours from the following: | | 3 |
| ARTS 1301 | Art Appreciation | |
| ARTS 1303 | Art History I | |
| COMM 1375 | Film Appreciation | |
| COSC 1324 | The Art of Computer Game Development | |
| DANC 2303 | Dance Appreciation | |
| MUSI 1306 | Music Appreciation | |
| MUSI 1309 | Jazz History and Appreciation | |
| MUSI 1310 | History of Rock and Roll | |
| PHIL 1330 | Arts and Ideas | |
| THEA 1310 | Theatre Appreciation | |
| *American History* | | |
| Select six hours from the following: | | 6 |
| HIST 1301 | U S History I 1763-1877 | |
| HIST 1302 | U S History II Since 1877 | |
| HIST 2301 | Texas History | |
| *Government/Political Science* | | |
| POLS 2301 | Intro to American Government I | 3 |
| POLS 2302 | Intro/American Government II | 3 |
| *Social and Behavioral Sciences* | | |
| Select three hours from the following: | | 3 |
| ANTH 2346 | Introduction to Anthropology | |
| ANTH 2351 | Cultural Anthropology | |
| BULW 1370 | Business Environment and Public Policy | |
| CRIJ 1301 | Intro to Criminal Justice | |
| ECON 1301 | Principles and Policies | |
| ECON 2301 | Principles of Economics I Macro | |
| ECON 2302 | Principles of Economics II Micro | |
| FINC 2310 | Intro to Consumer Finance | |
| INEN 2373 | Engineering Economics | |
| PSYC 2301 | General Psychology | |
| PSYC 2315 | Lifespan Development | |
| POLS 1301 | Intro to Political Science | |
| SOCI 1301 | Introduction to Sociology | |
| SOWK 2361 | Intro Social Work | |
| *Component Area Option - 6 Hours* [1] | | |
| ENGL 1302 | Composition II | 3 |
| MATH 2414 | Calculus II | 4 |
| **Required Major Courses** | | |
| *Chemistry Requirements* | | |
| CHEM 1111 | General Chemistry I Laboratory | 1 |
| CHEM 1112 | General Chemistry II Laboratory | 1 |
| CHEM 1311 | General Chemistry I | 3 |
| CHEM 1312 | General Chemistry II | 3 |
| CHEM 3111 | Organic Chemistry I Laboratory | 1 |
| CHEM 3112 | Organic Chemistry II Laboratory | 1 |
| CHEM 3131 | Inorganic Chemistry I Laboratory | 1 |
| CHEM 3311 | Organic Chemistry I | 3 |
| CHEM 3312 | Organic Chemistry II | 3 |
| CHEM 3331 | Inorganic Chemistry | 3 |
| CHEM 3401 | Quantitative Analysis | 4 |
| CHEM 4131 | Physical Lab | 1 |
| CHEM 4132 | Physical Lab | 1 |
| CHEM 4141 | Inorganic Chemistry II Laboratory | 1 |
| CHEM 4311 | Physical Chemistry I | 3 |
| CHEM 4312 | Physical Chemistry II | 3 |
| CHEM 4341 | Inorganic | 3 |
| CHEM 4381 | Chemical Communication | 3 |
| CHEM 4411 | Biochemistry I | 4 |
| CHEM 4461 | Instrumental Methods of Analysis | 4 |
| CHEM 4371 | Intro Research | 3 |
| or CHEM 4471 | Introduction to Research | |
| Excess hours from core applied here | | 2 |
| **Electives** | | |
| *Chemistry Electives* | | |
| Select a minimum of nine hours of CHEM electives [2] | | 9 |
| *Other* | | |

| | | |
|---|---|---|
| MATH 2415 | Calculus III | 4 |
| PHYS 2425 | University Physics I | 4 |
| PHYS 2426 | University Physics II | 4 |
| PHYS 3350 | Modern Physics | 3 |
| **Total Hours** | | **120** |

1 Additional hours are applied to degree requirements below.
2 At the 3000 to 4000 level - requires advisor approval.

| | | |
|---|---|---|
| **First Year** | | |
| **Fall** | | **Hours** |
| MATH 2413 | Calculus I | 4 |
| COMM 1315<br>or COMM 1321 | Public Speaking I<br>or Business and Prof Speech | 3 |
| BIOL 1406<br>or GEOL 1403 | General Biology I (Majors)<br>or Geology I: Physical Geology | 4 |
| Creative Art | | 3 |
| HIST 1301 | U S History I 1763-1877 | 3 |
| | **Hours** | **17** |
| **Spring** | | |
| MATH 2414 | Calculus II | 4 |
| HIST 1302 | U S History II Since 1877 | 3 |
| Social and Behavioral Science Core | | 3 |
| ENGL 1301 | Composition I | 3 |
| BIOL 1407<br>or GEOL 1404 | General Biology II (Majors)<br>or Geology II: Historical Geology | 4 |
| | **Hours** | **17** |
| **Second Year** | | |
| **Fall** | | |
| CHEM 1311 | General Chemistry I | 3 |
| CHEM 1111 | General Chemistry I Laboratory | 1 |
| PHYS 2425 | University Physics I | 4 |
| POLS 2301 | Intro to American Government I | 3 |
| ENGL 1302 | Composition II | 3 |
| | **Hours** | **14** |
| **Spring** | | |
| CHEM 1312 | General Chemistry II | 3 |
| CHEM 1112 | General Chemistry II Laboratory | 1 |
| PHYS 2426 | University Physics II | 4 |
| POLS 2302 | Intro/American Government II | 3 |
| Language, Philosophy and Culture | | 3 |
| | **Hours** | **14** |
| **Third Year** | | |
| **Fall** | | |
| MATH 2415 | Calculus III | 4 |
| CHEM 3311 | Organic Chemistry I | 3 |
| CHEM 3111 | Organic Chemistry I Laboratory | 1 |
| CHEM 3331 | Inorganic Chemistry | 3 |
| CHEM 3131 | Inorganic Chemistry I Laboratory | 1 |
| CHEM 3401 | Quantitative Analysis | 4 |
| | **Hours** | **16** |
| **Spring** | | |
| CHEM 3312 | Organic Chemistry II | 3 |
| CHEM 3112 | Organic Chemistry II Laboratory | 1 |
| CHEM 4371 | Intro Research (or CHEM 4471) | 3 |
| PHYS 3350 | Modern Physics | 3 |
| Chemistry Elective | | 6 |
| | **Hours** | **16** |
| **Fourth Year** | | |
| **Fall** | | |
| CHEM 4311 | Physical Chemistry I | 3 |
| CHEM 4131 | Physical Lab | 1 |
| CHEM 4411 | Biochemistry I | 4 |
| CHEM 4381 | Chemical Communication | 3 |
| Chemistry Elective | | 3 |
| | **Hours** | **14** |
| **Spring** | | |
| CHEM 4312 | Physical Chemistry II | 3 |
| CHEM 4132 | Physical Lab | 1 |
| CHEM 4341 | Inorganic | 3 |
| CHEM 4141 | Inorganic Chemistry II Laboratory | 1 |
| CHEM 4461 | Instrumental Methods of Analysis | 4 |
| | **Hours** | **12** |
| | **Total Hours** | **120** |