**BACHELOR OF ARTS DEGREE**
**MAJOR IN BIOCHEMISTRY**

| **Freshman Year** | | | **Credit Hours** |
|---|---|---|---|
| Fall | | | |
| BIOL 214 (+ lab) | Genes, Evolution and Ecology | | (4) |
| CHEM 105 | Principles of Chemistry I | | (3) |
| or | | | |
| CHEM 111 | Principles of Chemistry for Engineers | | (4) |
| MATH 125/121 | Math I / Calculus I | | (4) |
| SAGES | First Seminar | | (4) |
| PHED course | | | (0) |
| | | Total | (15-16) |
| Spring | | | |
| BIOL 215 (+ lab) | Cells and Proteins | | (4) |
| CHEM 106 | Principles of Chemistry II | | (3) |
| or | | | |
| ENGR 145 | Chemistry of Materials | | (4) |
| CHEM 113 | Principles of Chemistry Laboratory | | (2) |
| MATH 126/122/124 | Math II / Calculus II | | (4) |
| SAGES | University Seminar I | | (3) |
| PHED course | | | (0) |
| | | Total | (16-17) |

| **Sophomore Year** | | | |
|---|---|---|---|
| Fall | | | |
| CHEM 223/323 | Organic Chemistry I | | (3) |
| CHEM 233 | Organic Chemistry Laboratory I | | (2) |
| PHYS 115/121/123 | Physics I - Mechanics | | (4) |
| SAGES | University Seminar II | | (3) |
| GER course | | | (3) |
| PHED course | | | (0) |
| | | Total | (15) |
| Spring | | | |
| CHEM 224/324 | Organic Chemistry II | | (3) |
| CHEM 234 | Organic Chemistry Laboratory II | | (2) |
| PHYS 116/122/124 | Physics II – Electricity & Magnetism | | (4) |
| GER courses | | | (6) |
| PHED course | | | (0) |
| | | Total | (15) |

**Junior Year**

| | | | |
|---|---|---|---|
| Fall | | | |
| BIOC 307 | Introduction to Biochemistry | | (4) |
| CHEM 301/335 | Physical Chemistry I | | (3) |
| SAGES | University Seminar II | | (3) |
| [1]STAT 201/312/ 312R/313 | Statistics | | (3) |
| GER course or elective | | | (3) |
| | | Total | (16) |
| Spring | | | |
| BIOC 308 | Molecular Biology | | (4) |
| BIOC 391 | Research Project | | (3) |
| GER courses or electives | | | (9) |
| | | Total | (16) |

**Senior Year**

| | | | |
|---|---|---|---|
| Fall | | | |
| [2]BIOC 312 | Proteins and Enzymes | | (3) |
| or | | | |
| Approved technical elective | | | (3) |
| BIOC 373 | Biochemistry SAGES Seminar | | (3) |
| BIOC 391 | Research Project | | (3) |
| GER courses or electives | | | (6) |
| | | Total | (15) |
| Spring | | | |
| [2]BIOC 334 | Structural Biology | | (3) |
| or | | | |
| Approved technical elective | | | (3) |
| BIOC 393 | Senior Capstone Experience | | (3) |
| GER courses or electives | | | (9) |
| | | Total | (15) |

Total credit hours required for graduation: 120

[1]STAT course is required for B.A. students matriculating fall 2018 or later.
[2]B.A. students are required to take one of BIOC 312 or BIOC 334. For B.A. students who complete both BIOC 312 and BIOC 334, one course will serve as a required course and the other can serve as a technical elective.