

Biochemistry

Program Type

Major

Required Chemistry Courses

| Course Code | Title | Hours |
|-------------|---------------------------------------|-------|
| CHM 303 | Organic Chemistry I | 4 |
| CHM 304 | Organic Chemistry II | 4 |
| CHM 415 | Analytical Chemistry | 4 |
| CHM 452 | Biochemistry | 3 |
| CHM 453 | Advanced Biochemistry | 3 |
| CHM 454 | Laboratory Techniques in Biochemistry | 1 |
| CHM 470 | Junior Seminar | 1 |
| CHM 475 | Junior Research | 1 |
| | CHM 501 or 502 and 503 | 3-4 |
| CHM 570 | Senior Seminar | 1 |
| | Sub-Total Credits | 24 |

Required Biology Courses

Students must take at least two of the following courses:

| Course Code | Title | Hours |
|-------------|-----------------------|-------|
| BIO 302 | Developmental Biology | 4 |
| BIO 306 | Plant Physiology | 3 |
| BIO 309 | Genetics | 4 |
| BIO 320 | Advanced Cell Biology | 4 |
| BIO 360 | Microbiology | 4 |
| BIO 430 | Molecular Biology | 4 |
| | Sub-Total Credits | 8 |

Required Cognates

| Course Code | Title | Hours |
|-------------|--------------------------------|-------|
| BIO 200 | Cellular and Molecular Biology | 4 |
| MTH 220 | Calculus II | 4 |
| | PHY 101-102 or 201-202 | 8 |
| | Sub-Total Credits | 16 |

Total Credits: 32 + Cognates

ACS-Certified Biochemistry Degree Requirements (Optional)

Requirements for an ACS-certified biochemistry degree include all of the above with the addition of:

| Course Code | Title | Hours |
|-------------|--------------------------------|-------|
| CHM 406 | Advanced Inorganic Chemistry | 3 |
| | CHM 403, 419, 503, 504, or 522 | 3-4 |
| CHM 575 | Senior Thesis | 1 |
| | Sub-Total Credits | 7-8 |

A senior year comprehensive examination is also required.