Biology, BS/Biochemistry and Molecular Biology, MS

Credits and Requirements:

Total Undergraduate Major Credits: 128
Total Credit Hours for the combined degree: 150 (minimum). 12 credits of BMB graduate courses count toward undergraduate and graduate degree.
Additional Graduate Credits: 22

Total Undergraduate and Graduate Credits, and Total Credit Hours: 150

Note: Students who meet the admissions criteria of this program must file a formal application with the Office of Graduate Admissions during their junior year of study after receiving approval from their faculty adviser. Transfer students may be admitted who satisfy all course and admission requirements.

Example Timeline of Curriculum:

YEAR 1

Fall Semester:
BIO 101: Introductory Biology I (4 credits)
CHE 111: General Chemistry I (4 credits)
8–10 credits of University core or open electives

Spring Semester:
BIO 102: Introductory Biology II (4 credits)
CHE 112: General Chemistry II (4 credits)
8–10 credits of University core or open electives

YEAR 2

Fall Semester:
BIO 231: Genetics (4 credits)
CHE 223: Organic Chemistry I (5 credits)
BIO 210: Ecology (4 credits)
3–4 credits of University core or open electives

Spring Semester:
BIO 335: Cellular and Molecular Biology (5 credits)
CHE 224: Organic Chemistry I (5 credits)
6–8 credits of university core or open electives

YEAR 3

Fall Semester:
BIO 327: Cellular Biochemistry (4 credits)
BIO 480: Research in Biology I (3 credits)
PHY101: Physics I (4 credits)
6–7 credits of University core or open electives

Spring Semester:
BIO 490: Introduction to Research (3 credits)
BIO 481: Research in Biology II or BIO elective (3–4 credits)
PHY102: Physics II (4 credits)
6–7 credits of University core or open electives

YEAR 4

Fall Semester:
BMB 629: Molecular Biochemistry (4 credits)
BMB 626: Cellular Biochemistry and Advanced Molecular Biology (4 credits)
610 credits of university core or open electives

Spring Semester
BMB 710: Research I (4 credits)
8–10 credits of University core or open electives

YEAR 5

Fall Semester
BMB 711: Research II (4 credits)
BMB 605: Scientific Communications (2 credits)
BMB620 Quantitative Methods (3 credits)
3–4 credits of open electives

Spring Semester
BMB601 Graduate Colloquium (1 credit)
BMB609 Special Topics (2 credits)
BMB610 Seminar (1 credit)
BMB 630: Bioinformatics, Genomics, and Proteomics (4 credits)
BMB 712: Thesis Preparation (1 credit)