

BACHELOR OF SCIENCE DEGREE  
 MAJOR IN BIOCHEMISTRY

Freshman Year Credit Hours

Fall

CHEM 105 Principles of Chemistry I	(3)
Or	
CHEM 111	(4)
MATH 121 Calculus for Science & Eng. I	(4)
SAGES First Seminar	(4)
BIOL 214 + Lab Genes, Evolution and Ecology	(4)
PHED 100	<u>(0)</u>
Total	(15-16)

Spring

CHEM 106 Principles of Chemistry II	(3)
Or	
ENGR 145	(4)
CHEM 113 Principles of Chemistry Laboratory	(2)
MATH 122 Calculus for Science & Eng. II	(4)
PHYS 121 General Physics I, Mechanics	(3)a
BIOL 215 + Lab Cells and Proteins	(4)
PHED 100	<u>(0)</u>
Total	(16-17)

Sophomore Year

Fall

CHEM 223 Introductory Organic Chemistry I	(3)a
CHEM 233 Organic Chemistry Laboratory I	(2)
MATH 223 Calculus for Science & Eng. III	(3)
PHYS 122 General Physics II, E & M	(4)
GER course	<u>(3)</u>
Total	(15)

Spring

CHEM 224 Introductory Organic Chemistry II	(3)a
CHEM 234 Organic Chemistry Laboratory II	(2)
MATH 224 Elementary Differential Equations	(3)
SAGES University Seminar I	(3)
GER Course	<u>(3)</u>
Total	(14)

Junior Year

Fall

BIOC 307 General Biochemistry	(4)
CHEM 301 Physical Chemistry I	(3)
SAGES University Seminar II	(3)
GER Course	(3)
GER Course or elective	<u>(3)</u>
Total	(16)

Spring

BIOC 308 Molecular Biology	(4)
PHYS 221 Introduction to Modern Physics	(3)
CHEM 302 Physical Chemistry II	(3)
Elective or GER course	(3)
Elective	<u>(3)</u>
Total	(16)

Senior Year

Fall

BIOC 334 Structural Biology	(3)
BIOC 373 SAGES Biochemistry Seminar	(3)
BIOC 391 Research	(3)
Electives	<u>(6)</u>
Total	(15)

Spring

BIOC 312 Proteins and Enzymes	(3)
BIOC 393 Biochemistry Capstone	(3)
Statistics/Data Analysis Elective (PHYS 250, ECES 251, STAT 312, 313, or equiv.)	(3)
Electives	<u>(6)</u>
Total	(15)

Total Hours required for graduation: 123

a. Selected students may be invited to take PHYS 123, 124, Physics and Frontiers, I, II (Honors) in place of PHYS 121, 122.

b. Selected students may be invited to take CHEM 323, 324, Organic Chemistry, in place of CHEM 223, 224.