

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)
BIOC 391 Research	(3)
Elective	<u>(3)</u>
Total	(16)

Senior Year

Fall

BIOC 312 Proteins and Enzymes	(3)
BIOC 373 SAGES Biochemistry Seminar	(3)
BIOC 391 Research	(3)
Electives	<u>(6)</u>
Total	(15)

Spring

BIOC 334 Structural Biology	(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

- Selected students may be invited to take PHYS 123, 124, Physics and Frontiers, I, II (Honors) in place of PHYS 121, 122.
- Selected students may be invited to take CHEM 323, 324, Organic Chemistry, in place of CHEM 223, 224.
- Selected students may be invited to take CHEM 335, 336 Physical Chemistry in place of CHEM 301, 302