

B.S. Degree in Applied Biotechnologies (BSAB)

Plan of Study

There is no single semester-by-semester plan of study for the B.S. degree in applied biotechnologies. However, one possible sequence of courses for the degree is given below. Variation from this sample plan of study should be made in consultation with a departmental advisor.

Bachelor of Science (124 cr. required)

Freshman Year

First Semester

SCI-I 120 Windows on Science	1
BIOL-K 101 Concepts of Biology I	5
CHEM-C 105 Principles of Chemistry I	3
CHEM-C 125 Experimental Chemistry I	2
ENG-W 131 Elementary Composition I	3
MATH 221 Calculus for Technology I	3

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Second Semester

CHEM-C 106 Principles of Chemistry II	3
CHEM-C 126 Experimental Chemistry II	2
MATH 222 Calculus for Technology II	3
TCM 320 Written Communication in Science and Industry	3
Humanities Elective (List H)	3
Elective	3

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Sophomore Year

Third Semester

BIOL-K 322 Genetics and Molecular Biology	3
BIOL-K 323 Genetics and Molecular Biology Laboratory	2
*BITN 200 Principles of Biotechnology	3
CHEM-C 341 Organic Chemistry Lectures I	3
Social Sciences Elective (List S)	3
Elective	3

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Sophomore Year

Fourth Semester

BIOL-K 324 Cell Biology	3
*BITN 210 Business and Regulatory Practices	3
COMM-R 110 Fundamentals of Speech Communication	3
Comparative World Cultures Elective (List C)	3
Elective	3

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Junior Year

Fifth Semester

BIOL-K 483 Biological Chemistry <i>or</i>	
CHEM-C 484 Biomolecules and Catabolism	3
*BITN 220 Cell Culture and Fermentation	2
CSCI-N 207 Data Analysis Using Spreadsheets	3
HIST-H 114 History of Western Civilization II	3
Elective	3
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Sixth Semester

BIOL-K 356 Microbiology	3
BIOL-K 357 Microbiology Laboratory	2
*BITN 230 Analytical Methods in Biotechnology	2
STAT 301 Elementary Statistical Methods	3
Electives	4
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Senior Year

Seventh Semester

Cassette Elective	2
PHYS-P 201 General Physics I	5
Junior/Senior Integrator	3
Elective	3
Elective	3
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Eighth Semester

BIOL-K 484 Cellular Biochemistry	3
*BITN 240 Protein Purification and Formulation	2
*BITN 250 Biotechnology Internship	6
Elective	3
CAND 991 Candidate for Graduation	0
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*Indicates new course.