

BIOTECHNOLOGY MINOR
2007-09 Cal Poly Catalog
[College of Science and Mathematics](#)
Faculty Offices East (25), Room 229
(805) 756-2226

The Biotechnology Minor consists of a core of required courses and restricted elective courses. Advising for students in the Biotechnology Minor takes place in the student's major department, including selection of restricted electives and preparation of an agreement form listing specific courses to satisfy the requirements for the minor. The Biotechnology Minor Form is available from the Dean's Office or the Advising Center in the College of Science and Mathematics. Final approval of the minor is by the Program Coordinator in the College of Science and Mathematics.

The minor is open to any major except Biochemistry, Microbiology, and Biological Sciences with the Molecular and Cellular Biology concentration.

Biological Sciences students preparing for the minor should take CHEM 316, 317, and 371 to fulfill the organic chemistry and biochemistry requirements in their major.

Engineering-related Biotechnology:
 BRAE 448 Bioconversion (4)
 ENVE 443 Bioenvironmental Engineering (4)
 ENGR 581, 582, 583 Biochemical Engineering I, II, III (4, 4, 4)

Ethics:
 PHIL 339 Biomedical Ethics (4)
 SCM 451 Ethics in the Sciences (3)

Pharmaceutical Biotechnology:
 CHEM 377 Chemistry of Drugs and Poisons (3)
 CHEM 477 Biochemical Pharmacology (3)

Plant Biotechnology:
 BOT 323 Plant Pathology (4)
 BOT 324 Ornamental and Forest Pathology (4)
 BOT 450 Plant Biotechnology Laboratory (2)
 CHEM 472 Plant Biochemistry (3)

Core courses (15-21)	<i>Units</i>
BIO 161, MCRO 221, MCRO 224, <i>or</i> BOT 121	4-5
BIO 303, BIO 351, <i>or</i> CHEM 373	3-5
CHEM 313 <i>or</i> CHEM 371	5
Laboratory elective: ASCI 403, BIO/CHEM 375, BOT 450 <i>or</i> CHEM 474	2-5
SCM 201 Orientation to Biotechnology	1
Restricted electives	7-13
(See below for choices)	

Animal Biotechnology:
 ASCI 403 Applied Biotech in Animal Science (5)
 ASCI 406 Applied Animal Embryology (5)
 ASCI 503 Advanced Molecular Techniques in
 Animal Science (4)
 DSCI 330 Artificial Insemination and Embryo
 Biotech (4)
 VS 340 Immunology and Diseases (4)

Bioinformatics:
 BIO/CHEM 441 Bioinformatics Applications (4)
 CSC/CPE 448 Bioinformatics Algorithms (4)

Cell and Molecular Biology/Microbial Biotechnology:
 BIO 452 Cell Biology (4)
 BIO/CHEM 375 Molecular Biology Laboratory (2)
 BIO 426 Immunology (4)
 BIO 476 Gene Expression Laboratory (2)
 CHEM 472 Plant Biochemistry (3)
 CHEM 473 Immunochemistry (3)
 CHEM 474 Protein Techniques Laboratory (2)
 CHEM 528 Nutritional Biochemistry (3)
 MCRO 225 General Microbiology II (5)
 MCRO 320 Emerging Infectious Diseases (3)
 MCRO 402 General Virology (5)
 MCRO 433 Microbial Biotechnology (3)