BIOTECHNOLOGY MINOR

Required Courses
BI/CHEM 202 Orientation to Biotechnology 2
Select from the following: 4-5
- BIO 161 Introduction to Cell and Molecular Biology
- BOT 121 General Botany
- MCRO 221 Microbiology
- MCRO 224 General Microbiology I
Select from the following: 3-5
- BIO 303 Survey of Genetics
- BIO 351 Principles of Genetics
- CHEM 373 Molecular Biology
Select from the following: 5
- CHEM 313 Survey of Biochemistry and Biotechnology
- CHEM 371 Biochemical Principles
Laboratory elective- select from the following: 3-5
- ASCI 403 Applied Biotechnology in Animal Science
- BIO/CHEM 475 Molecular Biology Laboratory
- CHEM 474 Protein Techniques Laboratory

Approved Electives
Select from the following: 6-11

Animal Biotechnology
- ASCI 403 Applied Biotechnology in Animal Science
- ASCI 406 Applied Animal Embryology and Assisted Reproduction
- ASCI 440 Immunology and Diseases of Animals
- ASCI 503 Advanced Molecular Techniques in Animal Science
- DSCI 330 Artificial Insemination and Embryo Biotechnology

Bioinformatics
- BIO/CHEM 441 Bioinformatics Applications
- CSC 448 Bioinformatics Algorithms

Cell and Molecular Biology/Microbial Biotechnology
- BIO 426 Immunology
- BIO 452 Cell Biology
- BIO/CHEM 475 Molecular Biology Laboratory
- BIO 476 Gene Expression Laboratory
- CHEM 474 Protein Techniques Laboratory
- CHEM 528 Nutritional Biochemistry
- MCRO 225 General Microbiology II
- MCRO 320 Emerging Infectious Diseases
- MCRO 402 General Virolology
- MCRO 433 Microbial Biotechnology

Engineering-related Biotechnology
- BRAE 448 Bioconversion
- ENGR 581 Biochemical Engineering

Ethics
- PHIL 339 Biomedical Ethics
  or PHIL 341 Professional Ethics
  or SCM 451 Ethics in the Sciences

Pharmaceutical Biotechnology
- CHEM 377 Chemistry of Drugs and Poisons
- CHEM 477 Biochemical Pharmacology

Plant Biotechnology
- BOT 323 Plant Pathology

Total units 28