Required Courses

BIO/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
DSCI 330  Artificial Insenmination 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 428  Nutritional Biochemistry
MCRO 225  General Microbiology II
MCRO 320  Emerging Infectious Diseases
MCRO 402  General Virology
MCRO 433  Microbial Biotechnology

Engineering-related Biotechnology
BRAE 448  Bioconversion
ENGR 581  Biochemical Engineering
ENVE 443  Bioremediation Engineering

Ethics

PHIL 339  Biomedical Ethics
PHIL 341  Professional Ethics

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

Plant Biotechnology
BOT 323  Plant Pathology

Total units  28