2023-2024 Biotechnology B.A.

Lower Division Courses
All of the following lower division courses are required for the major.

**Chemistry**
- Math 3 or math placement of 300 or higher
  - CHEM 1A
    - General Chemistry [F]
  - OR
    - Previous or concurrent enrollment in Math 2 or math placement of 200 or higher
  - CHEM 3A (recommended)
    - General Chemistry [F/W]

**Introductory**
- BME 5
  - Introduction to Biotechnology [F/W]
- CSE 20
  - Beginning Programming in Python [F/W/Sp]
- BIOL 20A
  - Cell and Molecular Biology [F/W/Sp/Su]
- STAT 7/L
  - Statistical Methods for Biological Sciences [F/W/Sp]
  - OR
  - STAT 5
    - Statistics [F/W/Sp]

**Biotechnology and Society**
- BME 80H
  - The Human Genome [F]
  - OR
  - ECE 80B
    - Engineering Innovations for Medicine and Natural Sciences [Sp]
- BME 80G
  - OR
  - BME 18
    - Scientific Principles of Life [F]

**Upper Division Courses**
Complete all of the following courses.

- BIOL 20A
- BME 105
  - Genetics in the Genomics Era [Sp]
- BME 110
  - Computational Biology Tools [F/W/Sp]
- BME 160 (6 units)
  - Research Programming in the Life Sciences [F/W/Sp]

* CSE 20 is waived for students who have already passed BME 160.

**Electives**
Complete three of the following; at least two must be BME courses:
- BME 122H, BME 128*, BME 130, BME 132, BME 140, BME 177, BME 178*, ECE 104, FMST 124, FMST 133*, METX 100, SOCY 121, SOCY 123, SOCY 127P*

*Classes have additional prerequisites not covered by the major requirements

♦ Students may petition to have one upper-division biology course count as an elective, but most such courses have prerequisites that are not required for the major.

1. _______________________
2. _______________________
3. _______________________

**Disciplinary Communication (DC) Requirement**
Complete the following course.

- ELWR and BIOL 20A
- BME 185
  - Technical Writing for Biomolecular Engineers [F/W/Sp]

**Comprehensive Requirement**
Complete the following course.

- BME 175
  - Entrepreneurship in Biotechnology [W]

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The Bachelor of Arts in Biotechnology is intended for students who plan to be involved in the biotechnology industry as writers, artists, ethicists, executives, sales force, regulators, lawyers, politicians, and other roles that require an understanding of the technology, but not the intensive training needed for technicians, research scientists, engineers, and bioinformaticians. This major is designed to be suitable as a double major or minor for students in the humanities or social sciences.

This major cannot be paired as a double major for programs that have a restriction against adding a double major that is Bio related or paired with a Bioinformatics minor.

Student Name:

Adviser Name/Notes:

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