

B.S. Bioinformatics

Catalog Year 2020-2021

NAME _____ SID _____ Date _____

GENERAL EDUCATION COURSES:

Freshman Composition *(Complete one sequence.)*

ENGL 101 (3) _____ ENGL 102 (3) _____ *or*
(ENGL 106) _____
 ENGL 107 (3) _____ ENGL 108 (3) _____ *or*
 ENGL 109H (3) _____

Foundation Mathematics *(Placement may require coursework in addition to foundation requirement.)*

MATH 122 A + B (5) *or* MATH 125 (3) _____

Second Language *(Second Semester Proficiency)*

TIER ONE COURSES:

Individuals and Societies 150 *(6 units)*

Traditions and Cultures 160 *(6 units)*

TIER TWO COURSES:

Arts *(3 units)*

Humanities *(3 units)*

Individuals and Societies *(3 units)*

Diversity Emphasis Requirement: *(One course must meet this requirement. It can be double-dipped.)*

Note: Courses offered only in the fall, spring, or summer semesters are labeled with F, S, or SS.

FOUNDATION COURSES (38 - 40 units):

General Chemistry

CHEM 151 (4) _____ CHEM 152 (4) _____ *or*
 CHEM 141 & 143 (4) _____ CHEM 142 & 144 (4) _____

Organic Chemistry

CHEM 241A & 243A (4) _____ CHEM 241B & 243B (4) _____

Biology

ECOL 182 R & L (4) _____ MCB 181R & L (4) _____

Mathematics

MATH 263 (3) _____

Computer Science

ISTA 130 (4) _____

ISTA 131 (F; S; 4) _____

CORE REQUIREMENTS (23 units):

Seminar in BIOIN

ECOL 296B (F; 1) _____

Statistical Foundations

ISTA 116 (3) _____

Principles & Practice of Data

ISTA 331 (3) _____

Bioinformatics

ECOL 346 (S; 4) _____

Programming for Informatics

ISTA 350 (S; 4) _____

Evolutionary Biology

ECOL 335 (S; 4) _____

Genetics

ECOL 320 (SS; F; 4) _____

UPPER DIVISION ELECTIVES (22 units):

(Students must take a minimum of 22 units of upper division Bioinformatics electives.)

_____ ()

_____ ()

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University Requirements

120 total units _____ 42 upper division units _____

2.00+ Cum GPA _____ 2.00+ Major GPA _____

56+ university units _____ 18/30 UA major units _____

30 UA units _____ MCWA

Academic Plan for a B.S. in Bioinformatics

Semester 1

CHEM 151 or 141 + 143 MATH	4
122A + B or MATH 125	3 – 5
ENGL 101	3
Tier 1	3
ECOL 296B	1
Total	14 – 16

Semester 2

CHEM 152 or 142 + 144	4
ISTA 130	4
MATH 263	3
ENGL 102	3
Tier 1	3
Total	17

Semester 3

CHEM 241A + 243A	4
MCB 181R + MCB 181L	4
ISTA 131	4
Tier 1	3
Total	15

Semester 4

CHEM 241B + 243B	4
ECOL 182R + ECOL 182L	4
ISTA 116	3
Tier 1	3
Total	14

Semester 5

ECOL 320	4
ISTA 331	3
Major Elective	3
Major Elective	3
Second Language	4 – 5
Total	17 – 18

Semester 6

ECOL 335	4
ECOL 346	4
ISTA 350	4
Second Language	4 – 5
Total	16 – 17

Semester 7

Major Elective	3
Major Elective	3
Major Elective	3
Tier 2	3
General Electives	3 – 6
Total	15 – 18

Semester 8

Major Elective	3
Major Elective	3
Major Elective	3
Tier 2	6
General Electives	3
Total	15 – 18

Total units required: 120

Total upper division units required: 42

Please note that this checklist indicates BIOIN requirements. Additional coursework not listed on this page is required in order to graduate.