

# BIOINFORMATICS AND COMPUTATIONAL BIOLOGY MAJOR

## Program Tracking Sheet

Effective for students entering AY 2021-2022

Name:	Class Year:
Advisor:	2 <sup>nd</sup> Major:

**NOTES:** Minimum total academic credit = 15 units  
Residency Req.: Min. of 8 units must be completed at WPI

### HUMANITIES AND ARTS (6/3 unit)

All 5 HUA courses must be completed before beginning the Inquiry Seminar or Practicum.

#### Depth Component

Students must complete at least three thematically-related courses prior to the culminating Inquiry Seminar or Practicum in the same thematic area. At least one of the three courses should be at the 2000-level or above.

	Course	Term	Grade	Units
1				1/3
2				1/3
3				1/3
4	HU 3900 or HU 3910			1/3

#### Breadth Component

Students must take at least one course outside the grouping in which they complete their depth component. To identify breadth, courses are grouped in the following manner.

- i. art/art history, drama/theatre, and music (AR, EN/TH, MU);
- ii. foreign languages (AB, CN, EN, GN, SP);
- iii. literature and writing rhetoric (EN, WR, RH);
- iv. history and international studies (HI, HU, INTL);
- v. philosophy and religion (PY, RE).

Exception: May take all six courses in a foreign language

5				1/3
<b>Humanities Elective</b>				
6				1/3

### PHYSICAL EDUCATION (4 PE classes = 1/3 unit)

7				1/12
				1/12
				1/12
				1/12

### SOCIAL SCIENCE (2/3 unit) ECON, ENV, GOV, PSY, SD, SOC, SS, STS, DEV and ID2050

8				1/3
9				1/3

### THE INTERACTIVE QUALIFYING PROJECT (3/3 unit)

10				1/3
11				1/3
12				1/3

### FREE ELECTIVES (2/3 unit)

13				1/3
14				1/3

### MATHEMATICS (5/3 units) Courses with prefix: MA

Must include 3/3 unit of differential and integral calculus and statistics.

The additional 2/3 can be chosen from linear algebra, statistics, probability, calculus, and differential equations.

15				1/3
16				1/3
17				1/3
18				1/3

19				1/3
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### COMPUTER SCIENCE (4/3 units) Courses with prefix: CS

Must include 2/3 unit introductory programming and 2/3 unit discrete math and algorithms

20				1/3
21				1/3
22				1/3
23				1/3

### BIOLOGY (5/3 unit) Courses with prefix: BB

Must include cell biology, genetics, molecular biology, and 1/3 unit BB 2000 level laboratory

24				1/3
25				1/3
26				1/3
27				1/3
28	BB2_ _ _			1/6
28.5	BB2_ _ _			1/6

### CHEMISTRY (4/3 unit) Course with prefix: CH

Must include 2/3 unit of general chemistry and 2/3 unit of organic chemistry

29				1/3
30				1/3
31				1/3
32				1/3

### BIOINFORMATICS AND COMPUTATIONAL BIOLOGY (3/3 unit)

Chosen from BCB interdisciplinary courses

33				1/3
34				1/3
35				1/3

### SOCIAL IMPLICATIONS (1/3 unit)

Chosen from: CS3043 or PY 2713

36				1/3
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### ADVANCED DISCIPLINARY COURSES (6/3 unit)

Chosen from advanced courses in MA, CS, BB, or CH listed in the Undergraduate Catalog under Program Distribution Requirements for the BCB Major.

Must complete at least one unit at the 4000 level and at least one unit of advanced courses in one of the following areas: MA, CS, or BB/CH

37				1/3
38				1/3
39				1/3
40				1/3
41				1/3
42				1/3

### MAJOR QUALIFYING PROJECT (3/3 unit)

43				1/3
44				1/3
45				1/3