

BIOINFORMATICS AND COMPUTATIONAL BIOLOGY MAJOR

Program Tracking Sheet

Effective for students entering AY 2025-2026

Name:	Class Year:
Advisor:	2 nd 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. The Humanities and Arts Department will accept a maximum of 1/3 unit of AP credit towards the Humanities and Arts requirement.

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.

- art/art history, drama/theatre, and music (AR, TH, MU);
- modern languages (AB, CN, ISE, GN, SP);
- literature and writing rhetoric (EN, WR);
- history, humanities, and international and global studies (HI, HU, INTL);
- philosophy and religion (PY, RE).

Exception: May take all six courses in a modern language.

5				1/3
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Humanities Elective

6				1/3
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WELLNESS AND PHYSICAL EDUCATION (4 WPE 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 (3/3 unit)

13				1/3
14				1/3
15				1/3

PROGRAM DISTRIBUTION REQUIREMENTS FOR THE BIOINFORMATICS AND COMPUTATIONAL BIOLOGY MAJOR (30/3 Units) (Notes 1, 2, 3)

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

Mathematics must include 2/3 unit of differential and integral calculus, 1/3 unit of linear algebra, and 1/3 unit of statistics. The remaining 1/3 unit can be chosen from statistics, probability, calculus, and differential equations.

16				1/3
17				1/3
18				1/3
19				1/3
20				1/3

COMPUTER SCIENCE FOUNDATION (4/3 units) Courses with prefix: CS

Computer Science must include 2/3 unit of introductory programming (one 1000-level and one 2000-level introductory programming course from the CS Foundation list in the course catalog) and 2/3 unit of discrete mathematics and algorithms.

21				1/3
22				1/3
23				1/3
24				1/3

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

Biology must include 1/3 unit foundational biology courses for life science majors (BB 1101 or BB 1102), 1/3 unit cell biology or genetics, and 1/3 total units BB 2000-level laboratory (one 1/3 unit [preferred] or two 1/6 unit labs). The remaining 2/3 units may be BB lecture (non-laboratory) courses chosen from the Biology Foundation list in the course catalog, or any BB lecture course at the 3000 level or higher.

25				1/3
26				1/3
27				1/3
28				1/3
29	BB 2_ _ _			1/3 or 1/6
29.5	BB 2_ _ _			1/6 (if needed)

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

Chemistry must include 2/3 unit of general chemistry and 1/3 unit of organic chemistry. Additional chemistry may be chosen from general chemistry, organic chemistry or biochemistry.

30				1/3
31				1/3
32				1/3
33				1/3

BIOINFORMATICS AND COMPUTATIONAL BIOLOGY (2/3 unit)

Chosen from BCB interdisciplinary courses.

34				1/3
35				1/3

SOCIAL IMPLICATIONS (1/3 unit)

Chosen from: CS 3043, GOV 2302, GOV 2311, GOV 2314, GOV 2315, PY 2713, or PY/RE 2731

36				1/3
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ADVANCED ELECTIVE COURSES (6/3 unit)

Advanced electives courses supporting Bioinformatics and Computational Biology must be chosen from the Advanced Electives list in the course catalog. Must include at least 1 unit in the 'most related to BCB' category.

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

MAJOR QUALIFYING PROJECT (3/3)

Bioinformatics MQP (3/3 Units) must have an MQP faculty advisor who has a formal collaborative appointment in the Bioinformatics and Computational Biology program.

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

Note 1: Students must complete at least 4/3 units of courses at the 4000 level for the BCB major overall.

Note 2: No course may be used to fulfill two requirements. For instance, BCB 4001 may fulfill the BCB requirement or the Advanced Elective requirement, but not both.

Note 3: Students may not receive credit for both BCB 4001 and BCB 501. Students may not receive credit for both BCB 4004 and BCB 504.



WPI

Office of
Academic
Advising

4-year Plan Template

Name:	Class Year:
Advisor(s):	Major(s)/Minor(s):

Year 1					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes:

Year 2					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes:

Year 3					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes:

Year 4					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes: