



Biotechnology Certificate

PART TIME

This program roadmap represents one possible pathway to complete the program. **Please see a counselor** to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability.

Catalog: 2025-26

Total Units: 24

Start Term: Spring

First Year

Semester 1 (Spring)

12 Units

CAT.	COURSE	UNIT	PREREQUISITES
RE	CHEM 309 Integrated General, Organic, and Biological Chemistry	5	
Req	ENGL C1000 Academic Reading and Writing	3	
RE	BIOL 310 General Biology	4	

Semester 2 (Fall)

7 Units

CAT.	COURSE	UNIT	PREREQUISITES
Req	BIOT 301 Biotechnology and Human Health	3	(see below)
RE	STAT C1000 Introduction to Statistics	4	

BIOT 301 prerequisite: BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307

Second Year

Semester 3 (Spring)

5 Units

CAT.	COURSE	UNIT	PREREQUISITES
RE	BIOT 305¹ Introduction to Bioinformatics	1	(see below)
Req	BIOT 311 Biotechnology Laboratory Methods - Molecular Techniques	2	(see below)
Req	BIOT 312 Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques	2	(see below)

BIOT 305 prerequisite: BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, BIOT 301, or BIOT 307

BIOT 311/312 prerequisite: BIOL 300, BIOL 303, BIOL 310, BIOL 400, BIOL 440, BIOL 442, or BIOT 307

¹ or BIOT 307 or BIOT 498

CAREER PATH

Career Options:

This certificate opens the door for entry-level work in the bioscience industry in the areas of research and development, production, clinical testing, and diagnostic work, but many employers require a bachelor's degree or higher. Potential employers include biotechnology and pharmaceutical companies, as well as laboratories in hospitals, government and universities.

Advising Notes:

- BIOL 303 and 310 meet the minimum requirements for this certificate, but BIOL 400, 440, or 442 are recommended as they better prepare students for success in biotechnology.
- This certificate can be started in the fall as well. [See a counselor](#) to adjust the coursework.

Scheduling Notes:

- BIOT 301 is offered in the fall.
- BIOT 305 is offered as a 2nd-8-week class in the spring.
- BIOT 311 is offered as a 1st-8-week class in the spring.
- BIOT 312 is offered as a 2nd-8-week class in the spring.

Other Notes:

- Most of the courses in this certificate can also be applied toward the Biotechnology A.S. degree.
- An internship (BIOT 498) is highly recommended as it opens up

EXPLANATION OF CATEGORIES

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RE	Restricted Elective	A course selected from a list of elective courses specified for this program in the course list in the catalog, which can be replaced with another course from the same list
Req	Required Core	A course that is required for this program

potential employment opportunities. Students can earn between 0.5 – 4.0 units for related paid or unpaid work experience including volunteer and internship positions through BIOT 498. See the [Work Experience website](#) for more information.

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