Biotechnology Certificate

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: 2024-25

Total Units: 24

First Year Semester 1 12 Units CAT. COURSE TITLE UNIT RE **CHEM 309** Integrated General, Organic, and Biological Chemistry 5 Req ENGWR 300 College Composition 3 RE **BIOL 310** 4 **General Biology** 7 Units

Semester 2

CAT.	COURSE	TITLE	UNIT
Req	BIOT 301	Biotechnology and Human Health	3
RE	STAT 300	Introduction to Probability and Statistics	4

			Second Year			
S	Semester 3 5 Unit					
	CAT.	COURSE	TITLE	UNIT		
	Req	BIOT 311	Biotechnology Laboratory Methods - Molecular Techniques	2		
	Req	BIOT 312	Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques	2		
	RE	BIOT 305 ¹	Introduction to Bioinformatics	٦		
1	¹ or BIOT 307 or BIOT 498					

EXPLANATION OF CATEGORIES				
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		

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.

Scheduling Notes:

- BIOT 307 and 311 are offered as 1st -8week classes.
- BIOT 305 and 312 are offered as 2nd -8-week classes.

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 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.