



# Biotechnology A.S. Degree - career

FULL 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: 2024-25

GE Pattern: local AA/AS

Total Units: 60

## First Year

### Semester 1

15 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
RE	CHEM 309	Integrated General, Organic, and Biological Chemistry	5	IV
Req	STAT 300	Introduction to Probability and Statistics	4	IIb MC
Req	ENGWR 300	College Composition	3	Ila WC
GE	HCD 310	College Success	3	IIIb

### Semester 2

14 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
RE	BIOL 440 <sup>1</sup>	General Microbiology	4	
RE	ENGWR 302	Advanced Composition and Critical Thinking	3	
GE	POLS 301 / 481 <sup>H</sup>	Introduction to Government: United States	3	Va
GE	ART 339	Integrating Digital Media with Traditional Media I	3	I
GE		any PE activity course	1	IIIa

<sup>1</sup> BIOL 400 or BIOL 442 can be used in place of BIOL 440, but they have different prerequisites.

## Second Year

### Semester 3

16 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	BIOT 301	Biotechnology and Human Health	3	
RE	BIOT 305	Introduction to Bioinformatics	1	
Req	BIOT 307	Biotechnology and Society	2	
GE	BUS 300	Introduction to Business	3	Vb
Elec	COMM 301	Introduction to Public Speaking	3	
Elec	BIOL 305	Natural History	4	

### Semester 4

15 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	BIOT 311	Biotechnology Laboratory Methods - Molecular Techniques	2	

## CAREER PATH

### Career Options:

This degree 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:

- This roadmap is designed for students preparing for direct employment. There is another roadmap for students preparing to transfer.
- BIOL 400 or BIOL 442 can be used in place of BIOL 440, but have different prerequisites.

### Scheduling Notes:

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

### Other Notes:

- BIOT 498 is an internship, which must be set up prior to the start of the semester.
- 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. This course also works toward satisfying

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	BIOT 312	Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques	2	
Elec	BIOT 498	Work Experience in Biotechnology	2	
GE	HIST 330	Women in American History	3	VI
Elec	ANTH 300 / 480 <sup>H</sup>	Biological Anthropology	3	
Elec	BUS 312	Workplace Behavior and Ethics	3	

<sup>H</sup> honors courses

GE Area IIIb. See the [Work Experience website](#) for more information.

#### 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
GE	General Education	A course that fulfills a specific general education requirement for a degree, which can be replaced with another course that meets the same requirement
Elec	Degree Elective	A degree-applicable course that is part of a degree roadmap to ensure that there is a total of at least 60 units, which is a requirement for an associate degree

### Graduation Requirement

A course that fulfills a specific graduation requirement which can be replaced by another course that meets the same graduation requirement.

**MC** = Math Competency

**WC** = Writing Competency

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