



# Biotechnology A.S. Degree - transfer

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 7 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	ENGWR 300	College Composition	3	Ila WC
GE	HCD 310	College Success	3	IIIb
GE		any PE activity course	1	IIIa

## Semester 2 9 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	STAT 300	Introduction to Probability and Statistics	4	IIb MC
RE	CHEM 400	General Chemistry I	5	IV

# Second Year

## Semester 3 8 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
RE	ENGWR 302	Advanced Composition and Critical Thinking	3	
RE	CHEM 401	General Chemistry II	5	

#### Semester 4 8 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
RE	BIOL 400	Principles of Biology	5	
Elec	COMM 301	Introduction to Public Speaking	3	

# Third Year

## Semester 5 6 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Req	BIOT 301	Biotechnology and Human Health	3	
GE	POLS 301 / 481 H	Introduction to Government: United States	3	Va

## Semester 6 9 Units

CAT	. COURSE	TITLE	UNIT	GE AREA
Red	BIOT 307	Biotechnology and Society	2	

#### TRANSFER PATH

## Potential Transfer Majors:

- Biotechnology B.S.
- Biology B.S.
- Microbiology B.S.
- Cell & Molecular Biology B.S.
- Plant Biology B.S.

# Potential Career/Options After Completing a Bachelor's Degree:

 A bachelor's degree in Biology or Biotechnology opens doors to many careers in the biosciences.

## **Advising Notes:**

- This roadmap is designed for students preparing to transfer into a traditional biology degree program. There is another roadmap for students preparing for direct employment.
- This map starts with CHEM 400, which has prerequisites. Please see a counselor to add in prerequisite courses, if needed.

## **Scheduling Notes:**

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

# Other Notes to Students Preparing to Transfer:

 The chemistry and biology courses in this roadmap align with the requirements of many traditional

CAT.	COURSE	TITLE	UNIT	GE AREA
RE	BIOT 305	Introduction to Bioinformatics	1	
GE	HIST 308	History of World Civilizations, 1500 to Present	3	1
GE	POLS 310	Introduction to International Relations	3	Vb

# Fourth Year

Semester 7						
CAT.	COURSE	TITLE	UNIT	GE AREA		
Req	BIOT 311	Biotechnology Laboratory Methods - Molecular Techniques	2			
Req	BIOT 312	Biotechnology Laboratory Methods - Microbial and Cell Culture Techniques	2			
GE	HIST 330	Women in American History	3	VI		

Semester 8 6 Units

CAT.	COURSE	TITLE	UNIT	GE AREA
Elec	BIOL 415	Introduction to Biology: Biodiversity, Evolution, and Ecology	5	
Elec	FITNS 392	Yoga	1	

	EXPLANATION OF CATEGORIES					
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				
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				
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

biology degree programs, for students planning to transfer.

- Additional coursework may be necessary to transfer. Other requirements may include courses such as calculus (MATH 355 or 400), physics (PHYS 350 and 360), and organic chemistry (CHEM 420 and 421, or CHEM 423).
- See <u>ASSIST.ORG</u> for the transfer requirements of the institution to which you plan to transfer.

## Honors Courses (H):

Students with a cumulative GPA of 3.2 or better who complete 15 or more units of Honors coursework earn an <u>Honors</u> Transfer Certificate and can take advantage of honors-to-honors transfer agreements with highly selective colleges and universities, both public and private.

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