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

GE Pattern: Cal-GETC

Total Units: 60

First Year

Semester 1 7 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
RE	MATH 355 ¹ Calculus for Biology and Medicine I	4	through the placement process	2
GE	ENGL C1000 Academic Reading and Writing or	3		1A
	ENGL C1000H ^H Academic Reading and Writing - Honors	3		

¹ or MATH 400 (Calculus I). <u>See a counselor</u> to determine the appropriate math course(s) to take, based on your educational goals.

Semester 2 8 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	CHEM 400 General Chemistry I	5	(see below)	5A, 5C
GE	any Area 1B (Critical Thinking and Composition) course	3		1B

CHEM 400 prerequisite: CHEM 310 or another college chemistry course or a year of high school chemistry AND a passing score on the Chemistry Assessment Test at American River College

Second Year

Semester 3 8 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	CHEM 401 General Chemistry II	5	CHEM 400	
GE	any Area 1C (Oral Communication) course	3		1C

Semester 4 8 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	BIOL 400 Principles of Biology	5	CHEM 400	5B
GE	any Area 4 (Social & Behavioral Sciences) course (from 2 academic disciplines)	3		4

TRANSFER PATH

Potential Transfer Majors:

• Biology B.S.

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

Career opportunities include:

- physician
- physiologist
- molecular biologist
- biotechnologist
- · cell biologist
- geneticist
- researcher (lab or field)
- botanist
- zoologist
- · ecologist
- technical writer

A bachelor's degree in biology also prepares students for professional schools including medical school, dental school, and optometry school.

Advising Notes:

- Students working on this major are placed directly into MATH 355 or 400. <u>See a counselor</u> to determine if you would benefit from additional preparation or support courses.
- Students can substitute ESLW 340 for ENGL C1000/C1000H (formerly known as ENGWR 300/480).

Third Year

Semester 5 8 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	BIOL 415 Introduction to Biology: Biodiversity, Evolution, and Ecology	5	BIOL 400	
GE	any Area 3A (Arts) course	3		3A

Semester 6 7 Units

C,	AT.	COURSE	UNIT	PREREQUISITES	GE AREA
RI	E	PHYS 350 ² General Physics	4		
G	E	any Area 3B (Humanities) course	3		3B

Fourth Year

Semester 7 7 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
RE	PHYS 360 ² General Physics	4	PHYS 350	
GE	any Area 4 (Social & Behavioral Sciences) course (from 2 academic disciplines)	3		4

² or PHYS 410 and 421. <u>See a counselor</u> to determine the appropriate physics courses to take, based on your educational goals.

Semester 8 7 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
GE	any Area 6 (Ethnic Studies) course	3		6
Elec	any transferable elective course	3		
Elec	any transferable elective course	1		

	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				
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				
Req	Required Core	A course that is required for this program				
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				

 Transferable Elective Courses: any elective courses numbered 300-499, or having a 4-digit number starting with C.

Other Notes to Students Preparing to Transfer:

- CSUS and some other CSUs require STAT 300 for admission.
- Organic chemistry and second semester calculus are often required for transfer.
- See <u>ASSIST.ORG</u> for the transfer requirements of the institution to which you plan to transfer.
- The CSU system requires every student receiving a bachelor's degree to be knowledgeable about the Constitution of the United States, American history, and state and local government. This requirement is generally known as the American Institutions requirement. Students can complete this requirement at ARC before transferring. See a counselor for a list of approved courses.

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.