



# Mathematics A.S. Degree

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: 2025-26

GE Pattern: Cal-GETC

Total Units: 60

## First Year

### Semester 1

14 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	MATH 400 Calculus I	5	through the placement process	2
GE	ENGL C1000 Academic Reading and Writing or ENGL C1000H <sup>H</sup> Academic Reading and Writing - Honors	3 3		1A
GE	any Area 3A (Arts) course	3		3A
GE	any Area 4 (Social & Behavioral Sciences) course (from 2 academic disciplines)	3		4

### Semester 2

15 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	MATH 401 Calculus II	5	MATH 400	
GE	any Area 1B (Critical Thinking and Composition) course	3		1B
GE	any Area 5A (Physical Sciences) course	3		5A
GE	any Area 5C (Science Lab) course <sup>1</sup>	1		5C
Elec	any transferable elective course	3		

<sup>1</sup> The Area 5C (Science Lab) course must correspond with either the Area 5A (Physical Sciences) or Area 5B (Biological Sciences) course.

## Second Year

### Semester 3

15 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	MATH 402 Calculus III	5	MATH 401	
GE	any Area 1C (Oral Communication) course	3		1C
GE	any Area 4 (Social & Behavioral Sciences) course (from 2 academic disciplines)	3		4
GE	any Area 5B (Biological Sciences) course	3		5B

## TRANSFER PATH

### Potential Transfer Majors:

- Mathematics B.S.

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

- actuary
- analyst
- statistician
- researcher
- educator

### Advising Notes:

- Students working on this major are placed directly into MATH 400. [See a counselor](#) to determine if you would benefit from additional preparation or support courses.
- This degree can be completed using either the [local AA/AS](#) general education (GE) pattern or the [Cal-G ETC](#) transfer GE pattern. [See a counselor](#) to determine which pattern is best for you based on your academic goals.
- Students can substitute ESLW 340 for ENGL C1000/C1000H (formerly known as ENGWR 300/480).
- Transferable Elective Courses:** any elective courses numbered 300-499, or having a 4-digit number starting with C.

### Scheduling Notes:

- MATH 320/PHIL 324 is offered in the spring.

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Elec	any transferable elective course	1		

## Semester 4

16 Units

CAT.	COURSE	UNIT	PREREQUISITES	GE AREA
Req	MATH 410 Introduction to Linear Algebra	3	MATH 401	
Req	MATH 420 Differential Equations	4	MATH 401	
RE	MATH 320 Symbolic Logic <b>or</b>  PHIL 324 <sup>2</sup> Symbolic Logic	3  3		
GE	any Area 3B (Humanities) course	3		3B
GE	any Area 6 (Ethnic Studies) course	3		6

<sup>2</sup> or STAT C1000/C1000H (formerly know as STAT 300/480)

### 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
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
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

## Other Notes to Students

### Preparing to Transfer:

- Physics and computer programming courses are often required for transfer.
- STAT C1000 (formerly known as STAT 300) is required for Math Education concentrations at many four-year universities.
- See [ASSIST.ORG](https://assist.org) 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 H onors Transfer Certificate and can take advantage of honors-to-honors transfer agreements with highly selective colleges and universities, both public and private.