

# MATHEMATICS - ASSOCIATE IN SCIENCE FOR TRANSFER

Mathematics has been an important academic discipline in its own right for over 2500 years. In addition, mathematics provides the foundation for the study of physical, biological, health and computer sciences, engineering, statistics, economics, and many other disciplines. Mathematics graduates are employed as computer programmers, actuaries, data analysts, financial analysts, operations researchers, and educators. Others continue their studies and pursue advanced degrees in business, medicine, and law.

The Associate in Science in Mathematics for Transfer (AS-T) degree is intended for students who plan to complete a baccalaureate degree in Mathematics or a related field of study at a California State University. Students who complete this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts the AS-T will be required to complete no more than 60 semester units after transfer to earn a baccalaureate degree.

**To be awarded the Associate Degree for Transfer, students must have the following:**

- Completion of 60 CSU transferable semester units.
- A minimum of at least 2.0 GPA in CSU transferable courses (note that a higher GPA may be required in some institutions).
- Completion of at least 18 semester units in the major with a grade of "C" or better. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.
- Certified completion of the CSU General Education-Breadth (CSU GE-Breadth) requirements, or completion of the Intersegmental General Education Transfer Curriculum (IGETC) for CSU requirements.

**Please Note:** No more than 60 semester units are required for this degree and no additional requirements will be imposed by Evergreen Valley College.

## Program Learning Outcomes

- Develop creative and logical solutions to various abstract and practical problems.
- Use mathematics to model and solve applied problems in engineering and science.
- Demonstrate didactic reasoning to construct elementary proofs to theorems.

## Major Requirements

Course	Title	Units
<b>Core Requirements: Select Option 1 or Option 2</b>		
<i>Option 1:</i>		
MATH 071	Calculus I With Analytic Geometry	5
MATH 072	Calculus II With Analytic Geometry	5
MATH 073	Multivariable Calculus	5
<i>Option 2:</i>		
MATH 066	Calculus I Late Transcendentals for STEM	4
MATH 067	Calculus II Late Transcendentals for STEM	4

MATH 073	Multivariable Calculus	5
<i>Select 6 units from lists A and B below with at least 3 units from List A.</i>		6

### List A:

MATH 078	Differential Equations
MATH 079	Linear Algebra

### List B:

COMSC 075	Computer Science I: Introduction to Program Structures
MATH 063	Elementary Statistics
MATH 070	Discrete Mathematics
PHYS 004A	General Physics
or PHYS 007A	Calculus-Based General Physics for Scientists and Engineers - I

## Total Requirements

Course	Title	Units
Major Requirements		19-24
CSU GE-Breadth or IGETC for CSU <sup>1</sup>		37-39
Transferable Electives (as needed to reach 60 units)		
<b>Total Units</b>		<b>60</b>

<sup>1</sup> Some GE courses may be double-counted within the major and will reduce the number of units. General electives may be needed to reach 60 units. Please consult with a counselor to determine which courses are applicable.