

MATHEMATICS

missioncollege.edu/depts/math

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Mathematics: Associate in Science for Transfer (AS-T)

Associate in Science in Mathematics for Transfer (AS-T) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Mathematics. California Community College students who are awarded an Associate in Arts in Mathematics for Transfer (AS-T in Mathematics) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. Mathematics is a multifaceted subject of great beauty and application.

Mathematics courses provide the student with a universal language used to study quantities and relationships in all fields. Through the study of mathematics, the student develops the ability to think logically and abstractly, as well as developing the problem solving and computational skills necessary for success in any field of study.

Program Learning Outcomes:

- Solve mathematical problems using techniques appropriate to the course content and level of study.
- Solve applied problems using mathematical methods appropriate to the course content and the level of study.
- Apply technology to analyze and solve problems.
- Prepare students to transfer to an accredited 4-year college or university and succeed in upper division math courses to complete their Bachelor Degree in Mathematics.

Career/Transfer Opportunities:

Career opportunities include the following: teaching, education, researcher, computer programming, and statistical analysis.

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Required Courses:		Units
MAT 003A	Analytic Geometry and Calculus I -OR-	5.0
MAT 003AH	Analytic Geometry and Calculus I - Honors	5.0
MAT 003B	Analytic Geometry and Calculus II -	5.0
MAT 004A	Multivariable Calculus	4.0

List A. (4 units) Complete one (1) course from the following:		Units
MAT 004B	Differential Equations	4.0
MAT 004C	Linear Algebra	4.0

List B. (4 units) Complete one (1) course from the following:		Units
CIS 037A	Introduction to C Programming	4.0
CIS 043	Software Development With Java	4.0
MAT 010	Elementary Statistics -OR-	4.0
MAT 010H	Elementary Statistics- Honors	4.0
MAT 019	Discrete Mathematics	4.0

Required Units for the Major: 22.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0