Associate Degree for Transfer℠

MATHEMATICS FOR TRANSFER (AS-T)

The Associate in Science in Mathematics for Transfer (AS-T) degree is designed to facilitate transfer to a California State University in keeping with SB 1440. This degree reflects the Transfer Model Curriculum (TMC) supported by the statewide Academic Senate. A total of 19-21 units are required to fulfill the major portion of this degree. Students must also complete the California State University (CSU) General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC) (see the "General Education Requirements and Transfer Information" section of the catalog). Students planning to transfer to SDSU should consult with a counselor.

The following requirements must be met to be awarded an Associate in Science in Mathematics for Transfer (AS-T) degree:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
   a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
   b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher or "Pass" in all courses required for the major.

Mathematics has become essential and pervasive in the workplace. The study of mathematics provides a foundation for problem solving and logical reasoning skills. In today's highly technological society, the study of mathematics has become increasingly important. The Associate in Science degree in Mathematics offers a solid foundation for further study in mathematics and other mathematics-related fields. The primary emphasis of the mathematics major program is to prepare students for transfer to four-year institutions. Students should consult the catalog of the transfer school being considered for its specific requirements.

The Mathematics Department strives to impart the following **Program-level Student Learning Outcomes (PSLOs)** through the successful completion of the degree requirements. Students will:

1. Use appropriate theorems, formulas, and algorithms to solve mathematical problems from algebra, trigonometry, calculus and geometry.
2. Use appropriate technology to solve problems requiring mathematics.
3. Formulate, analyze, and differentiate mathematical functions numerically, graphically and symbolically and transition between these representations.
4. Communicate the mathematical process and assess the validity of the solution.

Associate Degree Major Requirements

Note: All courses must be completed with a letter grade of "C" or higher or "Pass."

Code	Title	Units
Required Core		
MATH-180	Analytic Geometry and Calculus I	5
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
List A		**3**
Select one of the following:		
MATH-284	Linear Algebra	
MATH-285	Differential Equations	
List B		
Select one of the following:		3-5
MATH-160	Elementary Statistics	
MATH-245	Discrete Mathematics	
MATH-285	Differential Equations	
PHYC-201	Mechanics and Waves	
CSIS-293	Introduction to Java Programming	
CSIS-296	Introduction to C++ Programming	
Units for the major		**19-21**
Plus General Education Requirements (CSU GE or IGETC) (https://catalog.gcccd.edu/grossmont/admission-information/general-education-transfer/)		37-39
Total Units		**60**

Complete transferable units as needed to reach 60.

Students completing IGETC may be awarded the degree, but they must complete a course from Area 1C: Oral Communication to meet CSU admission requirements.