

## PROGRAM OF STUDY

### Associate in Science in Mathematics for Transfer AS-T

The Mathematics Associate in Science Degree program offers training in both pure and applied mathematics, leading to careers in research, education, business, industry, and government, including such professions as educators, statisticians, actuaries, and operations research analysts. Many areas, such as the physical and social sciences, engineering, economics, and business, are dependent upon the use of applied mathematics in developing solutions to practical problems.

Students who complete Mathematic courses will demonstrate critical thinking skills, analyze abstract concepts, and transition from the concrete to the abstract in mathematical thinking.

The Associate in Science Degree in Mathematics for Transfer (AS-T) is intended for students who plan to transfer and complete a Bachelor's degree in Mathematics, or a similar major at a CSU campus. Students completing the AS-T degree in Mathematics are guaranteed admission to the CSU system, but not necessarily to a particular CSU campus or major of their choice. Students should consult with a counselor for more information on university admission and transfer requirements, as this AS-T in Mathematics may not be the best option for students intending to transfer to a particular CSU campus or to a college or university that is not part of the CSU system.

To earn an AS-T in Mathematics, students must complete the following:

1. 60 semester or 90 quarter CSU transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA.
3. Completion of 21-23 specified major units. All courses in major must be completed with a grade of C or better or a "P" if the course is taken on a "pass-no-pass" basis (title 5 § 55063). Even though a "pass-no-pass" is allowed, it is recommended that students complete their major courses with a grade.
4. Certified completion of the California State University General Education-Breadth (CSU GE-Breadth) pattern or the Intersegmental General Education Transfer Curriculum (IGETC for CSU) pattern.

#### **REQUIRED CORE: Select and complete 18 units from the following**

		<b>Units</b>
MATH M25A	Calculus with Analytic Geometry I	5
	<b>or</b>	
MATH M25AH	Honors: Calculus with Analytic Geometry I	5
MATH M25B	Calculus with Analytic Geometry II	5
MATH M25C	Calculus with Analytic Geometry III	5
MATH M31	Introduction To Linear Algebra	3

#### **Electives: Select and complete 3-5 units from the following**

		<b>Units</b>
CS M10A	Introduction to Computer Programming Using Structured C++	4
MATH M15	Introductory Statistics	4
MATH M15H	Honors: Introductory Statistics	4
MATH M21	Discrete Mathematics	3
MATH M35	Applied Differential Equations	3
	<b>or</b>	
PHYS M20A	Mechanics of Solids and Fluids	4
	<b>and</b>	
PHYS M20AL	Mechanics of Solids and Fluids Lab	1

**Total Units for the Major: 21 - 23**  
**General Education Requirements**

PID 469

**CSU GE-Breadth Certification Plan: 39**

**IGETC: 34\* - 37**

**\*IGETC Area 1C (Oral Communication)** is required for all CSU applicants. Students applying to a UC or Private School may earn this ADT without IGETC 1C but will be ineligible to apply to a CSU.

**TOTAL DEGREE UNITS: 60**