## MATHEMATICS, ASSOCIATE IN SCIENCE FOR TRANSFER

The Associate in Science in Mathematics for Transfer (Mathematics AS-T) Degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the degree are guaranteed admission to the CSU system, but not to a particular campus or major.

A student graduating with an Associate in Science in Mathematics for Transfer degree may transfer to a four-year institution to complete a Bachelor's Degree in mathematics and applied mathematics or similar programs.

To earn a Mathematics AS-T degree, students must meet the following requirements:

- 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 GE Transfer Curriculum (IGETC) or the California State University GE-Breadth Requirements (CSU GE-Breadth).
  - b. A minimum of 18 semester 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.
- 3. Earning a "C" grade or better, or "P," in all courses required for the major. Although a "P" grade is allowed (Title 5, Section 55062), it is recommended that students take the course for a letter grade (A, B, or C) due to unit limitations on "P/NP" courses.
- 4. Complete requirements in residency. For students in the Ventura County Community College District, a minimum of 12 units must be completed in residence within the college district.

Course ID	Title	Units/ Hours		
Required Core (15 units):				
MATH V21A	Calculus with Analytic Geometry I	5		
MATH V21B	Calculus with Analytic Geometry II	5		
MATH V21C	Multivariable Calculus	5		
Select 6 units minimum from List A and List B, with at least 3 units from List A				
List A: Select one to two courses (3-6 units)				
MATH V22	Introduction to Linear Algebra	3		
MATH V23	Introduction to Differential Equations	3		
List B: Select one course (3-5 units) if needed to complete major requirements				
CS V11	Programming Fundamentals	3		
CS V13	Object-Oriented Programming	3		
CS V17/MATH V52	Discrete Structures	3		
CS V30	Beginning C++	3		
CS V40	Beginning Java	3		
MATH V44		4		
PHYS V04	Mechanics for Scientists and Engineers	5		

and Mechanics Laboratory for Scientists

and Engineers

& V04L

Major Units	21-23
CSUGE-Breadth or IGETC-CSU Pattern	37-39
Electives (CSU transferable units to reach 60)	1-9
Double-Counted Units	(3-7)
DEGREE TOTAL	60

See a counselor or consult assist.org (http://assist.org), especially if you plan to transfer to a UC campus or a college or university other than CSU.

Year 1		
Fall Semester		Units/Hours
MATH V21A	Calculus with Analytic Geometry I	5
General Education		3
General Education		3
General Education		3
	Units/Hours	14
Spring Semester		
MATH V21B	Calculus with Analytic Geometry II	5
General Education		3
General Education		3
General Education		3
	Units/Hours	14
Summer Semester		
General Education		3
	Units/Hours	3
Year 2		
Fall Semester		
MATH V21C	Multivariable Calculus	5
MATH V22	Introduction to Linear Algebra	3
General Education		3
General Education		3
	Units/Hours	14
Spring Semester		
List A or List B Course		3
General Education		3
	Units/Hours	15
	Total Units/Hours	60

Upon successful completion of this program, students will be able to:

- Use formal systems of reasoning to draw well supported conclusions from given information.
- Comprehend and express mathematical constructs using correct mathematical notation.