# Mathematics

### San Jacinto Campus

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Degree(s)

### Transfer:

A.S.-T in Mathematics for Transfer 30679 AS.MATH.OPTBAST or 30679 AS.MATH.OPTCAST

*(using General Education Requirements Option B or C)* See Also: A.A. in Liberal Arts - Mathematics & Science Emphasis

Non-Transfer: None

Certificate(s) None

Employment Concentration Certificate(s)
None

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Note: Every effort has been made to keep program information current. Please use this information as a guide and consult with the chair of the department/program or an MSJC counselor.

## **PROGRAM DESCRIPTION**

The A.S.-T in Mathematics for Transfer consists of a clear sequence of courses which prepares students for transfer into the major. The study of mathematics concerns the nature and manipulation of known and unknown quantities. The MSJC mathematics transfer degree is designed to provide students with an appreciation of the nature, scope and power of mathematics, as well as an understanding of how mathematics is applied to business, engineering, science and daily life.

## **CAREER OPPORTUNITIES**

### Transfer Degree

For BA/BS careers, please see your transfer institution.

## TRANSFER PREPARATION

MSJC offers a range of course work to prepare students to transfer to four-year colleges and universities. All four-year institutions prescribe their own standards for course evaluation and admissions. Prospective transfer students are advised to research careers, degrees and majors in the Career/Transfer Center, access www.assist.org, review the MSJC catalog and meet with a counselor to expedite their transfer plan.

# LEARNING OUTCOMES

- Develop the ability to express ideas and reason logically regarding abstract situations.
- Synthesize ideas and apply mathematical reasoning and logic to the real world.
- Set up and solve problems using arithmetic, algebraic, and geometric models.
- Write mathematical information symbolically, visually, and numerically.
- Develop problem-solving and modeling skills.

## Degree

### A.S.-T in Mathematics for Transfer (18 units)

An Associate in Science degree in Mathematics for Transfer will fulfill the requirements for students to transfer to a fouryear college or university as a Mathematics major.

The major required for an A.S.-T in Mathematics for Transfer may be met by:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

### Required Core Courses/Sequence (12-15 units)

	MATH-211	Analytic Geometry and Calculus I	5 units		
	MATH-212	Analytic Geometry and Calculus II	5 units		
	or				
	MATH-212H	Honors Analytic Geometry and Calculus II	5 units		
	MATH-213	Analytic Geometry and Calculus III	5 units		
	or				
	MATH-213H	Honors Analytic Geometry and Calculus III	5 units		
	List A (I course)				
	MATH-215	Differential Equations	4 units		
	MATH-218	Linear Algebra	4 units		
List B (I course)					
	CSIS-113A	C++Programming - Level 1	3 units		
	CSIS-113B	Java Programming - Level 1	3 units		
	CSIS-123A	C++ Programming - Level 2	3 units		
	MATH-140	Introduction to Statistics	4 units		

PHY-201	Mechanics and Wave Motion	4 units		
PHY-202	Electricity and Magnetism	4 units		
or				
PHY-202H	Honors Electricity and Magnetism	4 units		
Units for Major				
CSU General Education or IGETC Pattern 37-				
Possible double counting (				
Transferable Electives (as needed to reach 60 CSU transferable units)				
Total Units for A.ST Degree 60 up				

Note: When selecting 4-5 unit courses for the Associate in Science in Mathematics for Transfer, keep in mind that you may not require more than 60 units for the entire degree.

This Associate in Science in Mathematics for Transfer degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A student completing this degree is guaranteed admission to the CSU system, but not a particular campus or major. Students should meet with a counselor to develop an educational plan and receive university admission and transfer requirements.



Mt. San Jacinto College 2014-2015 Catalog

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## **Math Curriculum Flowchart**

