

**San José City College**  
**Associate in Science for Transfer Degree**  
**2016-2017**

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**AS - T MATHEMATICS**

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The Associate in Science in Mathematics for Transfer (AS-T) degree will prepare students with the strong foundation necessary for pursuing studies at the university level in various majors such as mathematics, statistics, engineering, physics, chemistry, computer science, economics and business. A grade of “C” or better is required in all coursework completed for the major.

The AS-T in Mathematics is intended for students who plan to complete a baccalaureate degree in Mathematics or a related field of study at a California State University (CSU). Students who complete this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts the AS-T will be required to complete no more than 60 semester units after transfer to earn a baccalaureate degree.

After completing an AS-T in Mathematics, students will be able to:

- Demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.
- Use mathematical reasoning to develop mathematical models to solve real life applications.
- Use appropriate technology to enhance their mathematical thinking, solve mathematical problems, and judge the reasonableness of their results.

**To be awarded the Associate in Arts in Mathematics for Transfer degree, students must:**

- (1) Complete 60 semester units or 90 quarter units which are eligible for transfer to the California State University (CSU) system, including both of the following:
  - (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
  - (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) Obtain a minimum grade point average of 2.0.

*While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.*

**Students should meet with a counselor as early as possible in order to develop an effective educational plan.**

**FOR ADDITIONAL INFORMATION, SEE A COUNSELOR, VISIT THE CAREER/TRANSFER CENTER OR CONTACT THE FOLLOWING:**

Michael Divinia, [michael.divinia@sjcc.edu](mailto:michael.divinia@sjcc.edu)  
Mathematics and Sciences Division  
San José City College Website

408-298-2181 ext. 3998  
408-288-3716  
[www.sjcc.edu](http://www.sjcc.edu)

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Associate Degrees for Transfer (ADTs) also require that students must earn a “C” or better in all courses required for the major or area of emphasis. A ‘P’ (Pass) grade is acceptable grade for courses in the major if the course is taken on a “pass/no pass” basis.

### **MAJOR REQUIREMENTS (CORE, List A and List B):**

<b><u>REQUIRED CORE (15 units):</u></b>	<b><u>UNITS</u></b>
MATH 071    Calculus I with Analytic Geometry*	5
MATH 072    Calculus II with Analytic Geometry	5
MATH 073    Multivariable Calculus	5

Students also must complete one course from List A and one from List B, but may not use the same course for both areas.

#### **\* LIST A (3-4 units):**

MATH 078    Differential Equations <b>-or-</b>	4
MATH 079    Linear Algebra	3

#### **\* LIST B (3-5 units):**

CIS 054    C/C++ Programming <b>-or-</b>	3
CIS 084    Java Programming	
MATH 063    Elementary Statistics	3
MATH 070    Discrete Mathematics	4
MATH 078    Differential Equations	4
MATH 079    Linear Algebra	3
PHYS 004A    General Physics	5

**Total units from CORE, List A and List B** **21 - 24**

\* Consult with a counselor to determine which courses are applicable within the major at the CSU you are planning to transfer to.

### **AS-T DEGREE REQUIREMENTS:**

MAJOR REQUIREMENTS	21 - 24
CSU GE OR IGETC PATTERN	37 or 39
TRANSFERABLE ELECTIVES	<u>2 - 6</u>
<b>TOTAL REQUIRED UNITS</b>	<b>60</b>