Degree(s)

Transfer:

- A.S.-T in Mathematics for Transfer (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

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.

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

Transfer A.S.-T Degree

Mathematics

An Associate in Science degree in Mathematics for Transfer will fulfill the requirements for students to transfer to a four-year 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. ADT also requires 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 if pass is defined as a grade of C or better.

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

Required Core Courses/Sequence (12-15 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-211</td>
<td>Analytic Geometry and Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH-212</td>
<td>Analytic Geometry and Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH-212H</td>
<td>Honors Analytic Geometry and Calculus II</td>
<td>5</td>
</tr>
</tbody>
</table>
Instructional Programs

MATH-213  Analytic Geometry and Calculus III  5 units
or
MATH-213H Honors Analytic Geometry and Calculus III  5 units

List A: Select one
MATH-215  Differential Equations  4 units
MATH-218  Linear Algebra  4 units

List B: Select one
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  19-23
CSU General Education or IGETC Pattern  37-39
Possible double counting  0-9
Transferable Electives (as needed to reach 60 CSU transferable units)

Total Units for A.S.-T Degree  60 units

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.
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.

NOTE:
Students who scored lower than the minimum required assessment score for placement into MATH-055 or MATH-060 should consult with an MSJC counselor for available options.