

## MATHEMATICS

The Associate in Science in Mathematics for Transfer degree (AS-T in Mathematics) program provides students with sufficient understanding of mathematical concepts, skills, and applications to attain upper division status in mathematics at a four-year college or university, majoring in mathematics, physics, engineering, or computer science. Successful completion of the transfer degree in mathematics guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree in mathematics or related major, in preparation to pursue a career in the field of mathematics, engineering, statistics, actuarial science, business and management, law enforcement, government, and education. Students must complete the Associate Degree for Transfer requirements to earn the AS-T degree.

**Learning Outcomes:** Upon successful completion of the program, students will be able to:

- Analyze and evaluate complex issues or problems, draw reasoned conclusions and/or generate solutions, and effectively communicate their results.

### Associate in Science for Transfer Degree

Associate Degree Major Requirements	Units
<b>REQUIRED CORE:</b>	<b>15</b>
MATH 20A Calculus w/Analytic Geometry I (5)	
MATH 20B Calculus w/Analytic Geometry II (5)	
MATH 20C Calculus of Several Variables (5)	
<b>LIST A: Select one course from the following:</b>	<b>4</b>
MATH 31 Linear Algebra (4)	
MATH 32 Differential Equations (4)	
<b>LIST B: Select one course from the following or any course from LIST A not already selected:</b>	<b>4</b>
CSIS 10A Programming Methods I: Java (4)	
MATH 16 Elementary Statistics (4)	
MATH 40 Discrete Mathematics (4)	
PHYS 3A Science and Engineering Physics I (4)	
<b>TOTAL MAJOR UNITS</b>	<b>23</b>
<b>Associate Degree Requirements (as described above)</b>	<b>23</b>
<i>Contact an MPC counselor for major preparation at specific institutions.</i>	
<i>Complete CSU General Education or IGETC Pattern for a total of 60 transferable units (see pages 72-75 in the 2017-18 MPC Catalog).</i>	
<b>TOTAL DEGREE UNITS</b>	<b>60</b>