

# Mathematics

## Mathematics AS-T

The Associate in Science in Mathematics for Transfer (AS-T) allows for students to begin preparation for careers in quantitative professions such as actuarial science, education, computer programming, systems analysis and operations research analysis. In addition, a strong background in mathematics facilitates employment in fields such as engineering, economics, finance and genetics.

### Program Student Learning Outcomes

Upon completion of the program, students will be able to:

- produce, analyze and manipulate graphs of a function.
- correctly choose and apply a theorem or procedure to produce a result.
- solve an equation or a system of linear equations.
- use and or apply mathematical solutions to better understand the world around them.

### Associate Degree for Transfer requirements (pursuant to SB 1440):

- Complete a minimum of 18 semester units in a major or area of emphasis
- Complete IGETC or CSU General Education – Breadth requirements
- Complete total of 60 CSU transferable semester units
- Complete all required courses for the major or area of emphasis with a “C” or better
- Obtain an overall minimum grade point average of 2.0

Course #	Title	Units
<b>Required Core Courses</b>		
MATH-001A....	Introduction to Calculus.....	
MATH-001B.....	Calculus with Applications.....	
MATH-002A....	Multivariate Calculus.....	4
<b>Choose a minimum of 2 courses from below with at least one course from List A and one from List B:</b>		
<b>List A</b>		
MATH-002B.....	Differential Equations.....	
MATH-003A....	Linear Algebra.....	
<b>List B</b>		
MATH-002B.....	Differential Equations.....	
MATH-003A....	Linear Algebra.....	
MATH-025.....	Introduction to Statistics.....	
PHYSICS-004A.	Classical Mechanics.....	
	Total.....	22
	CSU-GE or IGETC requirements (allowing double counting).....	34-39
	Electives (must be transferable to CSU).....	0-4
	<b>Total .....</b>	<b>60</b>

*This is a **recommended sequence** of courses for timely completion of this program. Entry in to transfer level English and math is required to follow this recommended sequence. Please see your counselor to formalize your personalized educational plan or for alternative planning. Recommend completion of **MATH 015** prior to starting sequence.*

SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4
MATH-001A.....	MATH-001B.....	MATH-002A.....	MATH-002B.....
ENG-001A.....	AREA-C2..... 3	BIO-010 or 015..... 3	Area C1/2..... 3
COM-001 or 004..... 3	PHYS-004A..... 4	HIST-017A or B..... 3	POLSCI-001.....
Area C1..... 3	MATH-003A.....	Area A3..... 3	Area D..... 3
Area E..... 3	<b>16</b>	<b>13</b>	PHYS-004C..... 1
<b>17</b>			<b>14</b>