MATHEMATICS ASSOCIATE IN SCIENCE DEGREE

PROGRAM CODE: 2S03871

The **Mathematics Associate in Science Degree** is designed to prepare students to transfer to colleges and universities that offer bachelor's degrees in mathematics. Students with a degree in mathematics may pursue careers in a variety of industries such as education, finance, insurance, information technology, engineering and operations, manufacturing, consulting, analysis, research, and more. The Mathematics Associate in Science Degree requires a total of 18-21 units, in addition to other graduation requirements. NOTE: Students planning to transfer to a local CSU may also want to consider the Mathematics AS-T Degree.

Code	Title	Units
Required Courses (12 units):		
MATH 151 F	Calculus I (formerly MATH 150AF)	4
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
Restricted Electives (6-9 units):		**6-9**
NOTE: MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF and SOSC 120 F are considered equivalent courses; however, MATH 120 F and MATH 120HF are recommended for this degree.)		
CSCI 123 F	Introduction to Programming Concepts in C++	
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
or MATH 121 F	Introductory Probability and Statistics with Support	
MATH 170 F	Discrete Structures	4
MATH 171 F	Discrete Mathematics	4
MATH 172 F	Graph Theory and Linear Algebra	4
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
MATH 253 F	Additional Topics in Linear Algebra (formerly MATH 250CF)	2
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
PHYS 221 F	General Physics I	4
Total Units		**18-21**

Outcome 1: Analyze and synthesize information from functions, equations, models, or data sets in order to gain insights and draw conclusions.

Outcome 2: Distinguish between the multiple possible methods to solve mathematical problems in order to apply the appropriate problem-solving strategy and explain the process and solution to others.