

MATHEMATICS EMPHASIS (AA DEGREE A8989)

Natural Sciences Division

Degree A8989

An emphasis in Mathematics provides the student with an understanding of college level mathematics. In addition to the foundational calculus courses, students may select from computer science programming options.

This degree requires the completion of General Education coursework plus the following:

Required Courses

Course Prefix	Course Name	Units
Choose a minimum of 18 units from the following with at most two CSCI courses:		18
CSCI 110	Fundamentals of Computer Science	
CSCI 140	C++ Language and Object Development	
CSCI 145	Java Language and Object Oriented Programming	
MATH 130	College Algebra	
MATH 140	Calculus for Business	
MATH 150	Trigonometry	
MATH 160	Precalculus Mathematics	
MATH 180	Calculus and Analytic Geometry I	
MATH 181	Calculus and Analytic Geometry II	
MATH 280	Calculus and Analytic Geometry III	
MATH 285	Linear Algebra and Differential Equations	
Total Units		18

Recommended Electives

Course Prefix	Course Name	Units
CHEM 50	General Chemistry I	5
or CHEM 50H	General Chemistry I - Honors	
CHEM 51	General Chemistry II	5
MATH 100	Survey of College Mathematics	3
MATH 120	Finite Mathematics	3
PHYS 4A	Engineering Physics	5
PHYS 4B	Engineering Physics	5
PHYS 4C	Engineering Physics	5
STAT C1000	Introduction to Statistics	3
or STAT C1000H	Introduction to Statistics - Honors	

Math and Computer Science Website (<http://www.mtsac.edu/math/>)

Program Learning Outcomes

Upon successful completion of this program, a student will be able to:

- Demonstrate critical thinking skills in solving an application problem in the math and computer science courses that the student takes.
- Analyze success rates for the math courses that are assigned to the AA Degree.

Review Student Learning Outcomes (SLOs) (<http://www.mtsac.edu/instruction/outcomes/sloinfo.html>) for this program.