

MATHEMATICS EMPHASIS (AA DEGREE A8989)

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 | |
| For Area of Emphasis | | |
| 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 110 | Elementary Statistics | 3 |
| or MATH 110H | Elementary Statistics - Honors | |
| MATH 120 | Finite Mathematics | 3 |
| PHYS 4A | Engineering Physics | 5 |
| PHYS 4B | Engineering Physics | 5 |
| PHYS 4C | Engineering Physics | 5 |

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.