

MATHEMATICS

A.S. Degree

After completing the Mathematics major, students transferring to a four-year institution will be prepared for additional study in the following areas: actuarial science, applied mathematics, computer science (programming), statistics, theoretical mathematics.

Contact:
(408) 848-4701
las@gavilan.edu

Mathematics *A.S. Degree*

| | | | |
|-----------------------|--|----|-------|
| ENGR 5 | C++ Scientific Programming | 3 | units |
| MATH 1A | Single-Variable Calculus and Analytic Geometry | 4 | units |
| MATH 1B | Single-Variable Calculus and Analytic Geometry | 4 | units |
| MATH 1C | Multivariable Calculus | 4 | units |
| MATH 2 * | Linear Algebra | 3 | units |
| MATH 2C | Differential Equations | 3 | units |
| Total Units Required: | | 21 | UNITS |

Plus completion of general education requirements: units vary
Total Units Required: minimum of 60 UNITS

Recommended Electives: MATH 5; PHYS 4A, B, C

* There are times when a course listed as a requirement for a major or certificate cannot be offered in a reasonable timeframe. Course substitutions and waivers will be considered by the department. Please contact the department chairperson. This information is available from the Office of Instruction - (408) 848-4761.

Program Learning Outcomes: After completing this degree a student will be able to:

- ▶ identify and utilize appropriate mathematical operations in the simplification of expressions and solution of equations.
- ▶ compare and contrast various mathematical models and then apply the appropriate model to real world problems.
- ▶ describe, compare and contrast various mathematical functions using everyday language.
- ▶ describe, compare and contrast various mathematical properties and operations for real and imaginary numbers using everyday language.

Mathematics majors are encouraged to consult four-year college catalogs during their first semester at Gavilan College. See Gavilan General Education requirements on page 48.

General Education Requirements: A student may complete the Gavilan College AA/AS general education, the CSU-GE Breadth or the IGETC pattern, plus sufficient electives to meet a 60 unit total. See pages 48-56 or see a counselor for details.

NOTE: A course may be used to satisfy both general education and major courses. See "Double Counting Rule" on page 46.