

Mathematics

A.S.-T DEGREE: 60 units



Associate Degree
for Transfer™

DESCRIPTION

The Associate in Science in Mathematics degree and Associate in Science in Mathematics for Transfer degree provide opportunities for students to enter in a wide range of careers. 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.

PROGRAM LEARNING OUTCOMES

Upon successful completion of this program, students 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.
- ▶ Successful completion of the AS-T degree in Mathematics allows students to pursue a CSU baccalaureate degree program in the following areas: actuarial science, applied mathematics, computer science (programming), statistics, theoretical mathematics.

REQUIREMENTS (18 UNITS)

MATH1A	Single-Variable Calculus and Analytic Geometry. . .	4
MATH1B	Single-Variable Calculus and Analytic Geometry. . .	4
MATH1C	Multivariable Calculus	4
MATH2	Linear Algebra	3
MATH2C	Differential Equations	3

* 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.

ASSOCIATE DEGREE FOR TRANSFER REQUIREMENTS:

- ▶ Completion of 60 semester units that are eligible for transfer to the California State University, including both of the following:
 1. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
 2. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
- ▶ Obtainment of a minimum grade point average of 2.0.

Title 5 section 55063(a) also require that students must earn a "C" or better in all courses required for the major or area of emphasis, or a "P" if the course was taken on a 'pass-no-pass' basis.



UNITS REQUIRED FOR THE MAJOR: 18 :

DOUBLE COUNTED UNITS

GENERAL EDUCATION REQUIREMENTS:

CSU GE: 39; IGETC: 37

A student may complete the Gavilan College A.A./A.S. general education, the CSU-GE Breadth or the IGETC pattern, plus sufficient electives to meet a 60 unit total. See a counselor for details.

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

ELECTIVES NEEDED TO GET TO 60 UNITS

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- ▶ 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.

REQUIREMENTS (21 UNITS)

ENGR5	Engineering Programming and Problem Solving . . .	3
MATH1A	Single-Variable Calculus and Analytic Geometry . . .	4
MATH1B	Single-Variable Calculus and Analytic Geometry . . .	4
MATH1C	Multivariable Calculus	4
MATH2	Linear Algebra	3
MATH2C	Differential Equations	3

RECOMMENDED ELECTIVES:

MATH5	Introduction to Statistics	3
PHYS4A	Physics for Scientists and Engineers - Mechanics . . .	4
PHYS4B	Physics for Scientists and Engineers - Electricity and Magnetism	4
PHYS4C	Physics for Scientists and Engineers - Heat, Optics, Modern Physics	4

GENERAL EDUCATION REQUIREMENTS:

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

Music

A.A.-T DEGREE: 60 units



Associate Degree
for Transfer™

DESCRIPTION

The Music program maintains a place at Gavilan College as a subject of broad and passionate interest to performers, composers and theorists. At Gavilan College all these form a community dedicated to furthering a knowledge and love of music. The Music program at Gavilan College offers a wide range of courses for all students. While many of our students have gone on to have professional careers in music, others have used their study as an enriching foundation for other pursuits. Upon completing the Associate in Arts in Music for Transfer degree, students will be prepared to continue their study at a four-year institution. More specifically, this degree is intended for students transferring to a California State University Music program. Transfer students are urged to consult with a counselor and Music faculty to learn more about admission requirements to four-year institutions.

PROGRAM LEARNING OUTCOMES

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

- ▶ Upon completion of this degree, students will be prepared for pursuing a BA/BS in Music. The specific goal of the Associate in Arts in Music for Transfer program is to allow students a seamless transfer into a baccalaureate program in Music at a California State University.
- ▶ Listen, identify, and work conceptually with the elements of music: rhythm, harmony, melody, and structure;
- ▶ Demonstrate proficiency in areas of performance appropriate to his/ her musical needs and interests;
- ▶ Identify styles of music, including historical periods, composers, performers, stylistic traits, cultural influences and performance practices;
- ▶ Demonstrate fundamental proficiency in reading and writing of music notation.

REQUIREMENTS: (22 UNITS)

MUS3A	Harmony/Theory/Musicianship I	4
MUS3B	Harmony, Theory, Musicianship II	4
MUS3C	Harmony/Theory/Musicianship III	4
MUS3D	Harmony/Theory/Musicianship IV	4

To be taken for four semesters .5 units at a time:

MUS11A or	Applied Music/Piano	2
MUS11B	Applied Music/Guitar 2	2

To be taken for four semesters one unit at a time

MUS14	Instrumental Ensemble	4
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