MATHEMATICS - ASSOCIATE IN SCIENCE FOR TRANSFER

The Associate in Science for Transfer (AS-T) degree in Mathematics will prepare students with the strong foundation necessary for pursuing studies at the university level in various fields, including mathematics, statistics, engineering, physics, chemistry, computer science, economics and business.

To be awarded the Associate in Science in Mathematics for Transfer degree, students must:

- (1) Complete 60 semester units or 90 quarter units which are eligible for transfer to the California State University (CSU) system, including both of the following:
 - (A) The California General Education Transfer Curriculum (Cal-GETC) Requirements.
 - (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- (2) Obtain a minimum grade point average of 2.0.

While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.

Associate Degrees for Transfer (ADTs) also require that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is an acceptable grade for courses in the major if the course is taken on a "pass/no pass" basis.

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

- Demonstrate the ability to understand and use symbolic, graphical, numerical, and written representations of mathematical ideas.
- Develop critical thinking to enhance mathematical reasoning and to formulate mathematical models to solve applications.
- Solve mathematical problems, using technology when appropriate, and determine the reasonableness of the results.

Major Requirements

| Course | Title | Credits | | |
|------------------------------------------------------------------|--------------------------------------------|---------|--|--|
| Required Core: | | 15 | | |
| MATH 071 | Calculus I With Analytic Geometry | 5 | | |
| or MATH 071 | H Honors Calculus I With Analytic Geometry | | | |
| MATH 072 | Calculus II with Analytic Geometry | 5 | | |
| MATH 073 | Multivariable Calculus | 5 | | |
| List A: Complete | 3-4 | | | |
| MATH 078 | Differential Equations | 4 | | |
| MATH 079 | Linear Algebra | 3 | | |
| List B: Complete One Course from this list or One Course not 3-5 | | | | |
| already used in List A | | | | |
| CIS 024C | Python Programming | 3 | | |
| CIS 054 | C/C++ Programming | 3 | | |
| CIS 084 | Java Programming | 3 | | |
| STAT C1000 | Introduction to Statistics | 3 | | |
| BUS 060 | Fundamentals of Business Statistics | 3 | | |

| MATH 080 PHYS 004A | Discrete Structures for Computer Science General Physics | 5 |
|------------------------|----------------------------------------------------------|------------|
| PHYS 004A Total Units | General Physics | 5 21-24 |

AS-T Degree Requirements

| Course | Title | Credits |
|------------------------------------------------|-------|---------|
| Major Requirements | | 21-24 |
| Cal-GETC Requirements | | 34 |
| Transferable Electives (as needed to reach 60) | | 6-10 |
| Total Units | | 60 |