Moorpark College
Associate in Science in Mathematics 2.0 (AS-T)

Program Goals and Objectives

The goal of the Associate in Science in Mathematics 2.0 for Transfer Degree (AS-T in Mathematics 2.0) is to provide a seamless transfer pathway to a CSU as the curriculum aligns with the Transfer Model Curriculum (TMC) for Mathematics. The degree requirements include the common core of lower-division courses required to transfer and pursue a baccalaureate degree at a CSU in Mathematics and will replace the current AS-T in Mathematics.

Program Student Learning Outcomes

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

- demonstrate critical thinking skills, analyze abstract concepts, and transition from the concrete to the abstract in mathematical thinking.
- apply formal systems of reasoning in solving problems or analyzing arguments.
- express results or conclusions using correct mathematical notation.

Catalog Description

The program for the Associate in Science Degree in Mathematics offers training in both pure and applied mathematics, leading to careers in research, education, business, industry, and government, including such professions as educators, statisticians, actuaries, and operations research analysts. Many areas, such as the physical and social sciences, engineering, economics, and business, are dependent upon the use of applied mathematics in developing solutions to practical problems.

Students who complete Mathematics courses will demonstrate critical thinking skills, analyze abstract concepts, and transition from the concrete to the abstract in mathematical thinking. The Associate in Science in Mathematics 2.0 for Transfer Degree (AS-T) is intended for students who plan to transfer and complete a bachelor's degree in Mathematics, or a similar major at a CSU campus. Each CSU campus determines which of the degrees it offers are "similar" and can be completed with the preparation included in the AS-T in Mathematics 2.0 within 60 units once a student transfers, so which majors are "similar" varies from CSU to CSU. For a current list of what majors (and what options or areas of emphasis within that major) have been designed as "similar" to this degree at each CSU campus, please visit CSU's Associate Degree for Transfer Major and Campus Search webpage and seek guidance from a Moorpark College counselor. Students completing the AS-T degree in Mathematics 2.0 degree are guaranteed admission to the CSU system, but not necessarily to a particular CSU campus or major.

To earn an AS-T in Mathematics 2.0 degree, students must:

1) Complete 60 semester or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

a. The California General Education Transfer Curriculum (Cal-GETC) requirements.

b. The required coursework for the AS-T in Mathematics 2.0 degree as listed in the Moorpark College catalog.

2) Complete all courses in the major and Cal-GETC with a grade of "C" or better or "P" if the course is taken on a "pass-no-pass" basis. Even though a "Pass/Credit" grade is allowed (Title 5 §55062), it is highly recommended that students complete their major courses with a letter grade (A, B, or C). **Note**: the UC system allows a maximum of 14 semester (21 quarter) units of courses graded "Pass/No Pass" (Credit/No Credit) toward the 60 transferable semester units required for transfer admission.

3) Obtain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some transfer institutions and majors may require a higher GPA. Please consult with a counselor for more information.

4) Complete 12 semester units within the district.

Students transferring to a CSU campus that accepts the AS-T in Mathematics 2.0 degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major at a particular campus). This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor to obtain more information on university admission and transfer requirements.

Course ID	Title	Units/Hours
REQUIRED CORE		
MATH M25A	Calculus with Analytic Geometry I	5
or MATH M25AH	Honors: Calculus with Analytic Geometry I	
MATH M25B	Calculus with Analytic Geometry II	5
or MATH M25BH	Honors: Calculus with Analytic Geometry II	
MATH M25C	Calculus with Analytic Geometry III	5
MATH M31	Introduction to Linear Algebra	3
MATH M35	Applied Differential Equations	3
Units from LIST A		3-5
Total Units for the Major		**24-26**

Course ID	Title	Units/Hours
LIST A: Select and complete at least one of the following courses		3-5
CS M10J	Introduction to Computer Programming Using Java	4
CS M10P	Introduction to Computer Programming using Python Language	4
CS M125	Programming Concepts and Methodology I	3
ENGR M10	Programming and Problem-Solving in MATLAB	3
PHYS M20A & M20AL	Mechanics of Solids and Fluids and Mechanics of Solids and Fluids Laboratory	4, 1
Cal-GETC Pattern		**34**
Double-Counted Units		3-7
Elective Units		5-9
Total Units for the AS-T Degree		**60**