MATHEMATICS, ASSOCIATE IN SCIENCE FOR TRANSFER (AS-T)

Program Goals and Objectives

The goal of the Associate in Science in Mathematics for Transfer degree (AS-T in Mathematics) 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.

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 Mathematics Associate in Science Degree program 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 Degree in Mathematics for Transfer (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 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 the CSU's Associate Degree for Transfer Major and Campus Search (https://www.calstate.edu/apply/transfer/Pages/associate-degree-for-transfer-major-and-campus-search.aspx) webpage and seek guidance from a Moorpark College counselor. Students completing the AS-T degree in Mathematics are guaranteed admission to the CSU system, but not necessarily to a particular CSU campus or major.

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

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

a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education Breadth (CSU GE-Breadth) requirements. **NOTE:** To comply with SB 1440 and to not exceed the maximum units allowed, the IGETC is the recommended GE pattern to be used for this transfer degree.

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

2. 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.

3. Obtain a grade of “C” or better or “P” in all courses required in the major. Even though a “pass-no-pass” is allowed (Title 5 §55062), it is highly recommended that students complete their major courses with a letter grade (A, B, or C).

4. Complete requirements in residency. For students in the Ventura County Community College District, a minimum of 12 units must be completed in residence within the college district.

Students transferring to a CSU campus that accepts the AS-T in Mathematics 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 I: Early Transcendentals	5
or MATH M25AH	Calculus I: Early Transcendentals - Honors	
MATH M25B	Calculus II: Early Transcendentals	5
or MATH M25BH	Calculus II: Early Transcendentals - Honors	
MATH M25C	Calculus with Analytic Geometry III	5
MATH M31	Introduction to Linear Algebra	3
LIST A: Select and complete two courses (three if selecting Physics)		**6 - 9**
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
MATH M15	Introduction to Statistics	4
or MATH M15H	Introduction to Statistics - Honors	
MATH M21	Discrete Mathematics	3
MATH M35	Applied Differential Equations	3
PHYS M20A & M20AL	Mechanics of Solids and Fluids and Mechanics of Solids and Fluids Laboratory	4/1
Total Units for the Major		**24 - 27**
General Education Requirements		
IGETC Pattern		**37**
NOTE: IGETC 1C is required for all CSU applicants. Students applying to a UC or Private school may earn this ADT without IGETC 1C but will be ineligible to apply to a CSU.		
Double-Counted Units		3 - 7
Electives Units to meet 60 CSU transferable		2 - 4
Total Units Required for the AS-T Degree		**60**

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