MATHEMATICS 2.0

Associate in Science
Transfer Preparation* (Major Code: 01586)

Mathematics has become essential and pervasive in the workplace. Projections indicate that its use will expand as will the need for more workers with knowledge of college-level mathematics. In today's highly technological society, the study of mathematics has become increasingly important, particularly to computer science. Mathematics is a study that provides a foundation for problem solving and logical reasoning skills. It includes arithmetic, algebra, geometry trigonometry, calculus, statistics, and computer programming, etc. Mathematics is the science of numbers and their operations, interrelations, combinations, generalizations, and abstractions. Southwestern College offers transfer-level mathematics courses (numbered 100 or above) that will meet the lower-division needs of college transfer students. Additionally, Southwestern College offers low-unit or noncredit co-requisite support classes for many of our transfer-level classes.

Program Student Learning Outcome

- Use the basic definitions, properties, theorems, and techniques of Calculus.

The following is required for all AA-T or AS-T degrees:

- Completion of minimum 60 semester or 90 quarter units of transferable degree applicable courses.
- Minimum overall grade point average (GPA) of at least 2.0 in all transferable coursework, including a minimum "C" grade (or "Pass") required in each course for Cal-GETC.
- Minimum 18 semester or 27 quarter units in major or area of emphasis with a minimum grade of "C" (or "Pass") for each course in the major.
- Completion of the *California General Education Transfer Curriculum* (Cal-GETC) (https://catalog.swccd.edu/certificates-certifications-degrees-csuuc-requirements/intersegmental-general-education-transfer-curriculum-igetc/) pattern.

SDSU Note: San Diego State University (SDSU) accepts this ADT for transferring into the Mathematics (Science) BS major. Check SDSU Transfer Pathways (https://admissions.sdsu.edu/transfers/transfer-pathways/) and consult with an academic counselor.

Code	Title	Units
Program Requirements		
MATH C2210	CALCULUS I: EARLY TRANSCENDENTALS	5
MATH C2220	CALCULUS II: EARLY TRANSCENDENTALS	4
MATH 252	ANALYTIC GEOMETRY AND CALCULUS III	4
MATH 253	INTRODUCTION TO DIFFERENTIAL EQUATIONS	3
MATH 254	INTRODUCTION TO LINEAR ALGEBRA	3
Group A		**4-5**
Select one course		
MATH 130	INTRODUCTION TO COMPUTER PROGRAMMING	
PHYS 270 & PHYS 271	PRINCIPLES OF PHYSICS I and PRINCIPLES OF PHYSICS LABORATORY I	
Total Units		**23-24**

** MATH 253 does not articulate with the Differential Equations courses at some CSUs. The Mathematics Department recommends the STAT C1000 be taken as an elective.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Career and Transfer Connections. See catalog Transfer Courses Information (https://catalog.swccd.edu/student-success-support-program/student-services-and-college-services/other-services/transfer-courses/) section for further information.