

MATHEMATICS (MATH)

About the program

An Associate in Science in Mathematics Degree for Transfer puts you on the path toward a career in science, technology and engineering (STEM). Mathematics is used to develop techniques to model real-world applications, design efficient methods to solve problems, and create theories for problems we have yet to solve. An AS-T in Mathematics prepares students for entry to upper division CSU coursework in Mathematics. Math majors find careers in teaching, finance, computing, biotechnology and actuarial science - and many other areas dependent on the ability to think logically.

Degrees/Certificates within this Program:

- Associate in Science in Mathematics for Transfer

Transfer Opportunities

Learn more about transferring with an Associate Degree for Transfer at www.adegreewithaguarantee.com and www.redwoods.edu/transfer

For more information

- Counseling & Advising, 707-476-4150

Associate in Science in Mathematics for Transfer

	Units	CSU GE	IGETC Area	C-ID Descriptor
Required Core	12.0			
MATH 50A* Differential Calculus	4.0	B4	2A	MATH 210
MATH 50B Integral Calculus	4.0			MATH 220
MATH 50C Multivariable Calculus	4.0			MATH 230
Choose two courses from List A or one from List A and one from List B	7.0-8.0			
List A: (complete 3-6 units from the list below)				
MATH 45 Linear Algebra	4.0			MATH 250
MATH 55 Differential Equations	4.0			MATH 240
List B: (complete 1-4 units from the list below)				
MATH 4 MATLAB Programming	3.0			
MATH 15* Elementary Statistics	4.0	B4	2A	MATH 110
PHYS 4A* Calculus-Based Physics: Mechanics	4.0	B1, B3	5A, 5C	PHYS 205
Total Units for the Major:	19.0-20.0			
General Education (CSU GE or IGETC) units:		39.0	37.0	
Elective (UC or CSU Transferable) units:		as needed to complete 60 units total		
Total Degree Units (maximum):		60.0	60.0	

* Course may be double counted toward General Education.

Program Learning Outcomes

- Be able to read, write, and speak accurately about mathematical ideas and use correct mathematical notation
- Possess technical competence including uses of calculus, linear systems, and/or differential equations
- Be able to use technology to visualize functions, explore mathematical concepts, and solve problems
- Be able to use numerical, graphical, symbolic, and verbal representations to communicate with others in both written and oral form
- Possess a fundamental understanding of mathematics theory including applications of calculus and linear systems, relations of algebraic systems and classical problems, and roles of definitions, theorems, and proofs in algebra and analysis

About this Degree for Transfer

The Associate in Science in Mathematics for Transfer degree is designed to prepare students for transfer to the California State University system through developing the ability to read, write and speak about mathematical ideas with fluency and by building a fundamental understanding of mathematics theory including applications of calculus and linear systems, relations of algebraic systems and classical problems, and roles of definitions, theorems, and proofs in algebra and analysis.

Upon successful completion of this degree, students will possess strong technical competence including uses of calculus, linear systems, and/or differential equations. Emphasis is placed on building competency with the use of technology to visualize functions, explore mathematical concepts, and solve problems. The overarching focus of this degree pathway is to foster an ability to communicate mathematics through numerical, graphical, symbolic, and verbal representations of mathematical ideas.

Students transferring to a CSU campus that does accept the Associate in Arts in Mathematics for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor's degree. To meet the requirements for this degree the students must:

1. Complete a minimum of 60 CSU-transferable semester units.
2. Have 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 majors may require a higher GPA. Please consult with a counselor for more information.
3. Complete a minimum of 18 semester units in the major coursework. All courses in the major must be completed with a grade of C or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
4. Complete a minimum of 39 units in the California State University General Education-Breadth pattern (CSU GE Breadth); OR 39-41 units in the Intersegmental General Education Transfer Curriculum (IGETC) pattern.

Suggested Program Sequence

For information about the program length and suggested sequence of courses for this degree, please see an Academic Advisor.