

MS IN MATHEMATICS

Total units required for MS: 30, including at least 24 units of approved 200-level courses

Program Description

The Department of Mathematics and Statistics offers a Master of Science degree in Mathematics. The MS program is designed to provide qualified students with an opportunity to increase the breadth and depth of their mathematical knowledge and understanding. Beyond assuring that successful candidates are proficient in the basic areas of mathematics, the program is sufficiently flexible to permit graduates to pursue individual professional and mathematical interests ranging from teaching at the secondary or community college level to a career in the private sector, to preparation for graduate study beyond the master's degree. Graduate courses are usually offered in the late afternoon.

Admission Requirements

Admission as a classified graduate student in Mathematics requires:

- an undergraduate major in Mathematics which includes one year each of Abstract/Modern Algebra and Real Analysis or an undergraduate major in a related field together with one year each of Abstract/Modern Algebra and Real Analysis;
- a minimum 2.5 GPA; and
- a minimum 2.5 GPA in the last 60 units attempted and a 3.0 GPA in Mathematics coursework.

Students who have deficiencies in admission requirements that can be removed by specified additional preparation may be admitted with conditionally classified graduate status. Any such deficiencies will be noted on a written response to the admission application. No credit will be given towards the MS for the following:

Code	Title	Units
MATH 110A	Modern Algebra	3
MATH 110B	Modern Algebra	3
MATH 130A	Functions of a Real Variable	3
MATH 130B	Functions of a Real Variable	3

Admission Procedures

Students should apply to the program by the posted university application deadline for the fall or spring terms. All prospective graduate students, including Sacramento State graduates, must submit:

- an online application for admission; and
- one set of **unofficial transcripts** from all colleges and universities attended, other than Sacramento State, including transcripts from ALL community colleges attended and colleges where credit was earned as a high school student.

For more admissions information and application deadlines please visit <https://www.csus.edu/graduate-studies/future-students/graduate-programs-deadlines.html>. For more information about the MS in Mathematics program, please visit: <https://www.csus.edu/college/natural-sciences-mathematics/mathematics-statistics/explore.html>

Admission decisions are made approximately six to eight weeks after the application deadline date. Applicants will be notified of an admission decision via e-mail.

Minimum Unit and Grade Requirement for the Degree

Units required for the MS: 30 (including at least 24 units of approved 200-level courses).

Minimum Cumulative GPA: 3.0


Advancement to Candidacy

Each student must file an application for Advancement to Candidacy, indicating a proposed program of graduate study. This procedure should begin as soon as the classified graduate student has:

- removed any deficiencies in admission requirements;
- successfully completed at least 12 units in the graduate program with a minimum 3.0 GPA, including at least 12 units at the 200 level; and
- successfully completed a Graduate Writing Intensive (GWI) course in their discipline within the first two semesters of coursework at California State University, Sacramento.

Advancement to Candidacy forms are available on the Office of Graduate Studies website. The student fills out the form after planning a degree program in consultation with the MS in Mathematics graduate coordinator. The completed form is then returned to the Office of Graduate Studies for approval.

Program Requirements

Code	Title	Units
Required Core Courses (12 Units)		
MATH 210A	Algebraic Structures 	3
MATH 210B	Algebraic Structures	3
MATH 230A	Real Analysis	3
MATH 230B	Real Analysis	3
Electives (18 Units)		
A minimum of 12 units must be taken from Standard Electives		
Standard Electives		12
MATH 201		
MATH 202	Theory of Numbers	
MATH 204		
MATH 217		
MATH 220	Topology	
MATH 234	Complex Analysis	
MATH 241	Applied Functional Analysis	
MATH 248	Lie Theory	
MATH 271		
MATH 296x	Any 296 Series Math Course	
STAT 215	Probability Theory	
Alternative Electives		0 - 6
MATH 117	Linear Algebra	
MATH 161	Mathematical Logic	
MATH 162	Set Theory	
MATH 293A	²	
MATH 293B	²	

MATH 293C	²	
MATH 293D	²	
MATH 299	Special Problems	
MATH 500	Culminating Experience	
STAT 115A	Introduction to Probability Theory	
STAT 115B	Introduction to Mathematical Statistics	
STAT 299	Special Problems	
Other electives in mathematics and related disciplines as approved by the graduate coordinator.		
Culminating Requirement (0 units)		0
Written Comprehensive Examination		0
Total Units		30

¹ All courses applied to the MS in Mathematics degree, including the GWI course, must be completed with a grade of "B-" or better.

² MATH 293A, 293B, 293C, and 293D can be repeated for credit, but at most four units from these courses may be applied to the degree.