

# MA IN MATHEMATICS

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

## Program Description

The Department of Mathematics and Statistics offers a Master of Arts degree in Mathematics. The MA 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 to accommodate students who work full-time.

## Admission Requirements

Admission as a classified graduate student in Mathematics requires:

- an undergraduate major in Mathematics which includes one year each of Modern Algebra and Advanced Calculus or an undergraduate major in a related field together with one year each of Modern Algebra and Advanced Calculus;
- 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 MA 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

Applications are accepted as long as room for new students exists. However, students are strongly urged to apply by the posted university application deadline for the fall or spring terms, in order to allow time for admission before registration. All prospective graduate students, including Sacramento State graduates, must file the following with the Office of Graduate Studies, River Front Center 215, (916) 278-6470:

- an online application for admission; and
- one set of official transcripts from all colleges and universities attended, *other than Sacramento State*.

For more admissions information and application deadlines please visit <http://www.csus.edu/gradstudies/>.

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 MA: 30 (including at least 24 units of approved 200-level courses).

Minimum Cumulative GPA: 3.0

**Note:** A foreign language is not required for the MA degree. However, students who plan further graduate study are encouraged to take coursework in French, German, or Russian since proficiency in two of these languages is usually required in doctoral programs.

## 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;
- 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
- taken a Graduate Writing Intensive (GWI) course in their discipline within the first two semesters of coursework at California State University, Sacramento or secured approval for a WPG waiver.

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 a Mathematics advisor. The completed form is then returned to the Office of Graduate Studies for approval.

## Program Requirements

Code	Title	Units
<b>Required Courses (30 Units)</b>		
MATH 210A	Algebraic Structures <sup>1</sup>	3
MATH 210B	Algebraic Structures	3
MATH 230A	Real Analysis <sup>1</sup>	3
MATH 230B	Real Analysis <sup>1</sup>	3
Select four to six from the following:		12
		-
		18
MATH 202	Theory of Numbers	
MATH 220A	Topology	
MATH 220B	Topics In Topology	
MATH 234A	Complex Analysis	
MATH 234B	Topics in Complex Analysis	
MATH 241A	Methods of Applied Mathematics	
MATH 241B	Topics in Applied Mathematics	
MATH 248	Lie Theory	
STAT 215A	Introduction to Mathematical Statistics	
STAT 215B	Topics in Introduction to Mathematical Statistics	
MATH 296		
Select zero to two of the following with advisor approval:		6 -
		0
MATH 117	Linear Algebra	
MATH 161	Mathematical Logic	
MATH 162	Set Theory	
MATH 299	Special Problems	
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.

<b>Culminating Requirement (0 units)</b>	<b>0</b>
Written Comprehensive Examination	0
<b>Total Units</b>	<b>30</b>

All courses applied to the MA in Mathematics degree must be completed with a grade of "B-" or better.