

Master of Arts in Teaching-Mathematics

The Master of Arts in Teaching Mathematics (MAT) program is designed for single subject credential teachers who wish to deepen their mathematical knowledge for teaching as it applies to the secondary level.

Admission to the Program

In addition to the general requirements of the university, which include a baccalaureate degree from an accredited college, specific requirements for classification in the program are:

- Successful completion with a grade of "B" (3.0) or better in course work deemed equivalent to the following courses at California State University, San Bernardino:

MATH 2220	Calculus II	4
MATH 2310	Applied Linear Algebra	4
	or MATH 2320 Multivariable Calculus	
MATH 3100	Mathematical Thinking: Communication and Proof	4
MATH 3329	Euclidean Geometry with Transformations	3
MATH 2265	Statistics with Applications	3
- A teaching credential;
- Submission of a completed Master of Arts in Teaching Mathematics (MAT) application form;
- Three letters of recommendation, at least one of which addresses the applicant's educational background and at least one addressing the applicant's teaching practice;
- Submission of a one- or two-page typewritten statement of the student's area of interest, preparation for study in this program and professional goals;
- Approval by the Graduate Coordinator.
Students who do not meet these criteria may be admitted as conditionally classified graduate students following review by the Department of Mathematics and the College of Education.

Advising

Each graduate student must be advised by the graduate coordinator or other MAT faculty before enrolling in the program. Students will develop an appropriate course of study based on their preparation and interests in consultation with an advisor. The specific program must be approved by the MAT Graduate Committee prior to advancement to candidacy.

Advancement to Candidacy

In order to be advanced to candidacy, the student must:

- Achieve classified status;
- Submit a formal program of graduate work prepared in consultation with an advisor and approved by the MAT Graduate Committee;
- Complete at least 10 units and not more than 18 units of applicable work as a graduate student at this university, with a grade point average of at least 3.0 ("B");
- Complete a written paper in at least one of the following courses that achieves a satisfactory score on a departmental rubric

evaluating elements of scholarly writing and reflective practice: MATH 6301, MATH 6302, MATH 6303 or MATH 6304.

- Gain final approval of the program and of the candidacy itself by the Dean of Graduate Students.

Requirements for Graduation

- Advancement to candidacy for the degree;
- A minimum of 30 units of acceptable graduate level work as specified below in the formal program;
- No fewer than 24 units completed in residence at this university;
- Completion of the appropriate culminating experience option, in accordance with the student's approved program plan as specified below:
 - Complete the MAT Candidates' Seminar (MATH 6309) and comprehensive exams (MATH 6980) designed by the Mathematics department. The student may enroll in the examination no earlier than the last term in which program coursework is taken. The student may take the examination two times. The student may petition the department for subsequent attempts in exceptional circumstances. Approval of such petitions may be contingent upon completion of additional designated courses.
 - Design and complete a research project (MATH 6951-6954 and MATH 6963) according to the Mathematics Department MAT Project Guidelines available from the graduate coordinator.
- A grade point average of at least 3.0 ("B") in the core courses as well as an overall grade point average of 3.0 ("B") in the program, with no course grade being less than "B-";
- The Graduate Writing Assessment Requirement is met through successful completion of MATH 6301-6304;
- Any additional general requirements not cited above and listed in Graduate Degree and Program Requirements (<http://bulletin.csusb.edu/graduate-degree-programs/graduate-degree-program-requirements/>).

Degree Requirements (30 units)

(Program Code: MATM)

Core courses (22)

MATH 6301	Algebra from a Teaching and Problem Solving Perspective	4
MATH 6302	Geometry from a Teaching and Problem Solving Perspective	4
MATH 6303	Advanced Concepts of Secondary Mathematics from a Teaching and Problem Solving Perspective I	4
MATH 6304	Advanced Concepts of Secondary Mathematics from a Teaching and Problem Solving Perspective II	4
ESTM 6134	Assessment in STEM Education	3
ESTM 6344	Research Methods in STEM Education	3

Culminating Experience (8) **8**

Total Units **30**

Culminating Experience (8 units)

Students must complete one of the following:

Project Option (8 units)

Two units chosen from: 2

MATH 6951	Graduate Independent Study	
MATH 6952	Graduate Independent Study	
MATH 6953	Graduate Independent Study	
MATH 6954	Graduate Independent Study	
EDUC 6952	Advanced Independent Study Topics in Education	
MATH 6963	Master of Arts in Teaching Mathematics Project	3
	or EDUC 6960 Masters Project	

Electives (3)

Three units of 4000- to 6000- level mathematics courses that are applicable to the B.A. or B.S. in mathematics (non-teaching track) or MA in Mathematics and not previously applied to either degree. 3

Total Units 8**Examination Option (8 units)**

MATH 6309	MAT Candidates' Seminar	4
MATH 6980	MAT Comprehensive Examination	0

Electives (4)

Four units of 4000- to 6000- level mathematics courses that are applicable to the B.A. or B.S. in mathematics (non-teaching track) or MA in Mathematics and not previously applied to either degree. 4

Total Units 8