

# MATHEMATICS EDUCATION MS

The Master of Science in Mathematics Education is a Summer Start program that provides an opportunity for secondary mathematics teachers to advance their professional development by deepening and broadening their understanding of mathematics and of mathematics education, developing their understanding of mathematics education research and its relationship to practice, and developing their skills as teacher leaders in mathematics education.

## Graduate Advising Requirement

Students should consult the department Graduate Coordinator for advisor assignments. No later than the second term of graduate study, students must identify a graduate faculty member who agrees to serve as the chair of their graduate committee.

## Requirements for the MS in Mathematics Education: 30 units

1. Completion of an approved program consisting of 30 units of 400/500/600-level courses as indicated below. At least 21 units must be in 600-level courses.
2. Completion and final approval of an acceptable thesis or project.
  - a. Submission of a proposal (detailed outline) of the thesis or project, approved by the Graduate Advisory Committee before beginning the thesis/project. The proposal includes a statement of the problem, the basic research methods to be employed, justification of the study's value, and estimated time of completion. The proposal is a formal document which must have appropriate attention given to matters of format, documentation, and quality of writing.
  - b. Registration in MTHE 690 and either MATH 699T or MATH 699P.
  - c. Completion of a thesis or project as specified by the Graduate Advisory Committee and the Graduate Coordinator. The thesis/project shall be prepared according to the standards established in A Guide to Graduate Studies: Policies, Procedures, and Format available on Graduate Studies website.
  - d. An oral defense of the thesis or project.
3. Approval by the departmental graduate committee, the Graduate Coordinator, and the Graduate Coordinators Committee on behalf of the faculty of the University.

Course	Title	Units
<b>Mathematics and Statistics</b>		
Select 15 units from the following:		15
MATH 610	Topics in Mathematics for Secondary Teachers: Analysis	
MATH 620	Topics in Mathematics for Secondary Teachers: Geometry	
MATH 630	Topics in Mathematics for Secondary Teachers: Foundations of Mathematics	
MATH 633	Topics in Mathematics for Secondary Teachers: Number Theory	
MATH 635	Topics in Mathematics for Secondary Teachers: Discrete Mathematics	

MATH 637	Topics in Mathematics for Secondary Teachers: History of Mathematics
MATH 640	Topics in Mathematics for Secondary Teachers: Modern Algebra
MATH 650	Topics in Mathematics for Secondary Teachers: Probability and Statistics
MATH 660	Topics in Mathematics for Secondary Teachers: Mathematical Modeling
MATH 698	Grad Advanced Topics in Math

Other 400/500/600-level courses may be selected if approved by the Graduate Coordinator.

Mathematics Education		
MTHE 601	Research in Mathematics Education	3
MTHE 602	Equitable Access to Mathematics in the Secondary Classroom	3
MTHE 680	Research Methods in Mathematics Education.	3
or EDMA 610	Introduction to Inquiry in Education	
Culminating Activity		
MTHE 690	Thesis/Project Writing Seminar	1-3
MATH 699T	Master's Study	1-3
or MATH 699P	Master's Project	
<b>Total Units</b>		<b>26-30</b>

## Graduate Grading Requirements

All courses in the major (with the exceptions of Independent Study - 697, Comprehensive Examination - 696, Master's Project - 699P, and Master's Thesis - 699T) must be taken for a letter grade, except those courses specified by the department as ABC/No Credit (400/500-level courses), AB/No Credit (600-level courses), or Credit/No Credit grading only. A maximum of 10 units combined of ABC/No Credit, AB/No Credit, and Credit/No Credit grades may be used on the approved program (including 697, 696, 699P, 699T and courses outside the major). While grading standards are determined by individual programs and instructors, it is also the policy of the University that unsatisfactory grades may be given when work fails to reflect achievement of the high standards, including high writing standards, expected of students pursuing graduate study.

Students must maintain a minimum 3.0 grade point average in each of the following three categories: all course work taken at any accredited institution subsequent to admission to the master's program; all course work taken at California State University, Chico subsequent to admission to the program; and all courses on the approved master's degree program.

Continuous enrollment is required. At the discretion of the academic program, a maximum of 30 percent of the units counted toward the degree requirements may be special session credit earned in non-matriculated status combined with all transfer coursework. This applies to special session credit earned through Open University, or in courses offered for academic credit through Regional and Continuing Education. Correspondence courses and UC Extension coursework are not acceptable for transfer. Correspondence courses and UC Extension coursework are not acceptable for transfer.

## Graduate Time Limit

All requirements for the degree are to be completed within seven years of the end of the semester of enrollment in the oldest course applied toward the degree. See Master's Degree Requirements (<https://>

catalog.csuchico.edu/graduate-requirements/masters-degree-requirements/) for complete details on general degree requirements.

## **Graduate Requirement in Writing Proficiency**

All students must demonstrate competency in writing skills as a requirement for graduation. Mathematics Education graduate students will demonstrate their writing competence through the successful completion of MTHE 601 with a grade of B or higher.

## **Prerequisites for Admission to Conditionally Classified Status**

The Department of Mathematics and Statistics does not admit students to conditionally classified status.

## **Prerequisites for Admission to Classified Status**

1. A bachelor's degree from an accredited institution, or an equivalent approved by Graduate Studies.
2. Course work equivalent to a bachelor's degree in mathematics approved by the Department of Mathematics and Statistics.
3. State certification to teach secondary mathematics.
4. Satisfactory grade point average as specified in "Admission to Master's Degree Programs" in the University Catalog.
5. The personal characteristics which are conducive to academic and professional success, such as maturity, motivation, interpersonal skills, leadership and breadth of experience as reported in two letters of recommendation. The two letters should be from those who know the student's work, preferably one from a faculty member from a mathematics department and one from the secondary teaching profession.
6. The motivation to pursue graduate study in mathematics education as evidenced in a two-page written statement describing experience, purpose, and career goals.
7. Approval by the Department of Mathematics and Statistics and Graduate Studies.

## **Advancement to Candidacy**

In addition to the requirements listed above:

1. Completion of 9 semester units of course work in residence, including MTHE 601 and one course from MATH 610-MATH 660,
2. Formation of the Graduate Advisory Committee.
3. Development of a program of course work approved by the Graduate Advisory Committee Chair and the Graduate Coordinator.
4. A minimum grade point average of 3.0.