

Florida State University
School of Teacher Education
Master's (M.S.) in Curriculum & Instruction
Major in Mathematics Education

The major in Mathematics Education is intended to prepare graduates to be leaders in the classroom. There are two specific profiles of applicants that the program is designed to serve:

Secondary Mathematics Education

The applicant is certified to teach high school mathematics and/or typically has experience teaching middle or high school mathematics as a full-time classroom teacher. The applicant also has substantial coursework in undergraduate mathematics, having successfully completed at least two courses in mathematics beyond Calculus III with grades of “B” or better. Coursework may include graduate courses in mathematics, as well as courses in advance studies of Mathematics Education. Note that applicants who are interested in teaching at the community college level will need at least 18 units of graduate coursework in mathematics.

Middle Grades Mathematics Education

The applicant is certified to teach middle grades mathematics and/or may have experience teaching K-12 mathematics. The applicant must have completed substantial coursework in undergraduate mathematics but has completed at least Calculus II with a grade of “B” or better. Coursework may include mathematics content courses designed especially for teachers, as well as courses in advance studies of Mathematics Education.

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Program Element	Credits	Element Description
Curriculum MAE 5146 School Mathematics Curriculum	3	This category addresses critical issues of PK-12 curriculum. A broad range of scope, sequence, and integration issues would include: (1) The historical, philosophical, psychological, and social foundations upon which curriculum is constructed; (2) The development and use of national and state standards; and (3) Applications in contemporary design (aims, goals, implementation, and assessment alternatives).

<p>Teaching and Learning MAE 5691 Mathematics Learning and Teaching</p>	<p>3</p>	<p>This category addresses considerations and decisions addressing the needs of learners, selection of teaching methods, and the social interactions necessary to enhance the quality of the learning environment. Tenets of learning theory applied as best practice (e.g., Universal Design for Learning, Response to Intervention, etc.) would be represented in this core category.</p>
<p>Instructional Technology MAE 5658 Using Technology in the Teaching of Mathematics</p>	<p>3</p>	<p>This category addresses considerations, decisions, and critical issues relevant to enhancing instructional effectiveness and efficiency through the use of web tools, social media, and immersive environments, productivity tools, project-based learning, etc. Consideration is also given to effective online/asynchronous teaching and learning best practices.</p>
<p>Research and Scholarship MAE 5795 Seminar on Research in Mathematics Education EDF 5481 Methods of Educational Research (or other course(s) recommended by advisor)</p>	<p>3-6</p>	<p>This category broadly addresses the interpretation, use, and conduct of research. Master's degree (MS) candidates will design studies, collect relevant information in a field-based environment, and interpret results that lead to instructional improvement and enhanced student achievement. Candidates specifically interested in continuing studies at the doctoral level will, in addition, complete EDF 5481 (Methods of Educational Research, 3 credits).</p>
<p>Major Concentration (18-21 semester credit hours)</p>		
<p>Specialization courses in Mathematics Education (MAE), Mathematics/Statistics (minimum of 9 hours) or other areas (e.g., Graduate courses in Educational Foundations (EDF), General Education (EDG), etc.) + MAE 8966 Comprehensive Exams</p>	<p>18-21</p>	<p>In addition to core program categories (required of all students), master's degree candidates will complete a major that reflects an individual specialty area (e.g., Early Childhood Education, English Education, Mathematics Education, etc.).</p> <p>NOTE: 18 hours of graduate mathematics is required for eligibility for community college teaching (and "dual enrollment" qualifications), and may result in more than 21 hours of coursework in this category.</p>