

New Program Proposal

Elementary Mathematics Specialist (EMS), Graduate Certificate

The Elementary Mathematics Specialist (Grades 1-6) certificate recognizes teachers with special training and expertise in mathematics content at the elementary school level. The program includes online courses and school-based internships. This program is designed for full-time classroom teachers.

Note: For those candidates who wish to pursue a Master’s degree in Education, the M.Ed. can be earned using 18 of the credit hours required for the Elementary Math Specialist Certificate and 12 hours of additional coursework at the graduate level as required by the UMSL College of Education.

To be recommended for Missouri Department of Elementary and Secondary Education Elementary Math Specialist Certification (Grades 1-6), teachers must have a valid Missouri teacher’s certificate, two years of appropriate classroom teaching experience as determined by DESE, and successful completion of any required DESE assessments.

Required Coursework

Mathematics Content and Pedagogy

TCH ED 6271	Teaching and Learning of Number and Operations from an Advanced Perspective	3
TCH ED 6272	Teaching and Learning Rational Numbers from an Advanced Perspective	3
TCH ED 6273	Geometry and Measurement for Elementary Mathematics Specialists	3
TCH ED 6274	Algebraic Reasoning for Elementary Mathematics Specialists	3

TCH ED 6281	Internship - Number and Operations in Elementary Schools	1-2
TCH ED 6282	Internship - Rational Numbers in Elementary Schools	1-2
TCH ED 6283	Internship-Geometry/Measurement in Elementary Schools	1-2
TCH ED 6284	Internship-Algebraic Reasoning in Elementary Schools	1-2
TCH ED 6276	Data and Probability for Elementary Mathematics Specialists	3
Leadership Development in Mathematics		
TCH ED 6277	Foundations of Mathematics Leadership for Elementary Mathematics Specialists	2
TCH ED 6278	Mathematical Leadership for Elementary Schools Advanced	3
Total Hours		24-28

Rationale

This new certificate program aligns with DESE approved coursework that the College of Education has offered for several semesters.