

MASTER OF EDUCATION

Mathematics Specialist

Definition and Duties of the Mathematics Specialist

The Master of Education: Mathematics Specialist degree is designed to prepare individuals with an academic background in education to assume the role of Mathematics Specialist in their school or district. Graduates of this program may be called on to perform the following duties:

1. Act as a resource person for mathematics education
2. Mentor others in the school in planning and teaching mathematics
3. Assist staff in interpreting data and designing approaches to improve students' achievement and instruction in mathematics
4. Help ensure mathematics instruction is aligned with state and local curricular frameworks
5. Facilitate teachers' use of instructional strategies, including differentiated instruction for diverse learners
6. Work with families and community leaders to foster school-based partnerships focused on learning mathematics
7. Provide school-wide and/or district-wide professional development for teachers of mathematics.

Program Outcomes

The Master of Education: Mathematics Specialist degree prepares students to assume the role of Mathematics Specialist in elementary and secondary schools. Upon completion of this program, advanced candidates will be able to:

1. Demonstrate an improvement in their own problem solving skills.
2. Observe other teachers and make recommendations to improve the teaching of mathematics
3. Calculate statistics and interpret the results to identify problem areas in the teaching of mathematics.
4. Demonstrate a deeper understanding of key ideas in number and operations, algebra and functions, geometry and measurement, data analysis, statistics, and probability
5. Identify and use various teaching techniques to improve the teaching of mathematics
6. Incorporate technology into the teaching of mathematics
7. Identify current problems and issues in mathematics education
8. Demonstrate the ability to successfully fulfill the duties of a Mathematics Specialist

Assessment

Faculty members in the Department of Mathematics place a high priority on the assessment of student learner outcomes. Assessment procedures for the Mathematics Specialist program include, but are not limited to: written papers, course exams, comprehensive exams, and successful completion of a final field project/practicum.

Program Admission Requirements

Unconditional admission to the M.Ed. Mathematics Specialist program requires the following:

1. The applicant must be admitted to the School of Graduate and University Studies
2. The applicant must have a Bachelor's Degree and a teaching certificate in elementary, secondary, or special education.
3. Prior to completion of all program requirements, the applicant must expect to complete three years of classroom teaching where teaching mathematics is part of the assignment.
4. The applicant must have completed at least 12 hours of undergraduate mathematics coursework with a GPA of at least 3.0 on a 4-point scale.

Conditional admission to the M.Ed. Mathematics Specialist program may be offered on a case-by-case basis at the discretion of the Admissions Committee.

All applications for admission to the program will be reviewed by the Admissions Committee. Following the submission of a complete application, each applicant will receive a letter from the Program Coordinator informing him or her of the admissions decision and, for those admitted to the program, the name and contact information of the applicant's appointed advisor. The Admissions Committee may choose to admit students unconditionally (all requirements met at acceptable levels), admit students conditionally, or deny admission.

Students who are admitted conditionally to the M.Ed. Mathematics Specialist program will be given instructions detailing what must be done to ensure unconditional admission and the necessary timeline for securing unconditional admission from the Program Coordinator. Students who are denied admission will be provided with conditions for re-application in their denial letter.

Students may complete up to 12 graduate hours under conditional admission while completing the requirements for unconditional admission. Students admitted conditionally to the M.Ed. Mathematics Specialist program must maintain a minimum of a 3.00 GPA to remain in the program. (See further information in the Retention and Dismissal Conditions section.)

Students who have completed 12 graduate hours, but who have not completed the necessary requirements for unconditional admission to the M.Ed. program will not be allowed to matriculate further in the program until unconditional admission is secured.

Admission to Candidacy

Students must apply for Candidacy in the Master of Education Degree in Mathematics Specialist upon completion of 12 hours of course work. Students may not enroll for more than 12 hours in the program until they are granted Admission to Candidacy. The qualifications for Admission to Candidacy are:

1. Unconditional admission to the M.Ed. Mathematics Specialist Program
2. Completion of at least 12 semester hours of graduate study at Southeastern
3. Completion of EDUC 5203, Introduction to Educational Research
4. An approved Plan of Study (Degree Plan) has been filed with the School of Graduate and University Studies
5. A GPA of 3.00 or better on all graduate work taken toward the Master's Degree
6. Module I of the Advanced Certificate Portfolio completed and checklist filed with the Program Coordinator

Comprehensive Examination Requirements

Candidates for the Master of Education Degree in Mathematics Specialist must perform satisfactorily on a Comprehensive Examination administered after completion of all but nine hours of the degree program requirements. Candidates must receive a passing score on the Comprehensive Examination prior to enrollment in EDUC 5683, Field Project/Practicum. Contact the coordinator of the Mathematics Specialist Program for further information regarding this examination.

Grade Point Average for the Requirement of a Master of Education Degree in Mathematics Specialist

A GPA of 3.00 or better on all graduate work completed at Southeastern Oklahoma State University, all graduate courses taken toward the degree, all major courses in the student's major field, and an overall GPA of 3.00 or better on all graduate courses completed is required for graduation. If a course is retaken, the last grade will be counted in the computation of the overall GPA. No grade of "D" or below will count toward a graduate degree. A course in which an "F" is received is considered a course completed, just as any course in which a student has received a grade.

Retention and Dismissal Conditions

1. Students with **unconditional admission status** who fail to achieve and maintain an overall graduate GPA of 3.00 after the completion of 12 semester hours of graduate enrollment will be placed on academic probation. A student who fails to achieve a 3.00 overall graduate GPA by the end of the next semester of enrollment will be placed on academic suspension for a period of two (2) semesters. The summer semester

counts as one semester. After the academic suspension is served, the student may be allowed to re-enroll only upon the recommendation of the Admissions Committee and with the approval of the Graduate Dean. Failure to achieve an overall 3.00 graduate GPA during any subsequent semester of enrollment will result in suspension, and the student will not be allowed to pursue further graduate study in a degree program for a period of two (2) years.

2. As noted above, students with **probationary admission status** who fail to achieve a 3.00 graduate GPA after the completion of 12 semester hours will be suspended and will not be allowed to pursue further graduate study in a degree program for a period of two (2) years.
3. A student receiving a grade of “C” on three (3) graduate courses will be suspended and will not be allowed to pursue further graduate study at Southeastern Oklahoma State University for a period of two (2) years. A student receiving a grade of “D” or “F” on any graduate course will be suspended and will not be allowed to pursue further graduate study at Southeastern Oklahoma State University for a period of two (2) years. At the completion of suspension, the student must reapply to the School of Graduate and University Studies and to the Master of Education Degree program in Mathematics Specialist. If readmitted to the School of Graduate and University Studies and the program, the student must retake the course or courses in which he or she received the 3rd “C,” or “D,” or “F” and must maintain a GPA of 3.00 or higher in that semester and subsequent semesters until completion of the program. These provisions apply to all courses taken, with the exception of duplicated courses (courses with the same prefix, number, and title), in which case only the most recent grade will be used. These provisions also apply to all pass/fail courses and all incomplete courses in which an “I” has been changed to an “F.”
4. Courses taken from other institutions will not be transferable if taken during a period of suspension from Southeastern Oklahoma State University.

Professional Associations

Mathematics Specialist students are strongly encouraged to become members of the National Council of Teachers of Mathematics.

Course Requirements

- I. Required Research Component: 3 hours
 - A. EDUC 5203 – Introduction to Educational Research
- II. Required Professional Education Component: 9 hours
 - A. EDUC 5223 – Educational Statistics
 - B. EDAD 5323 – Supervision of Teaching
 - C. SPED 5443 – Diagnosis and Remediation of Math-Related Deficits
- III. Required Specialization Component: 18 hours
 - A. MATH 5513 – The Teaching of Algebra and Functions
 - B. MATH 5523 – The Teaching of Number and Operations
 - C. MATH 5533 – The Teaching of Geometry and Measurement
 - D. MATH 5543 – Mathematical Problem Solving for Teachers
 - E. MATH 5553 – The Teaching of Data Analysis, Statistics, and Probability
 - F. MATH 5593 – Problems and Issues in Mathematics Education
- IV. Required Field Component: 3 hours
 - A. EDUC 5683 – Practicum-Math Specialist