



THE GRADUATE SCHOOL

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MASTER OF ARTS IN TEACHING (MAT) – MATHEMATICS

PROGRAM OBJECTIVES:

The Master of Arts in Teaching Mathematics, a thirty-six credit program that is to be completed within a six year period, is available for those wishing to prepare for initial license in secondary mathematics or for practicing mathematics teachers who wish to earn a degree that increases their formal education in mathematics and pedagogy.

ADMISSION REQUIREMENTS:

- A completed application form, available from the Graduate School Office, and a \$35.00 nonrefundable application fee made payable to Salem State College.
- A complete, official transcript documenting the award of a bachelor's degree.
- Official transcripts of any graduate courses taken or degrees held.
- Three completed Reference for Graduate Admission forms. These forms are available with the application. Please include references from people who have known you in both professional and academic capacities. Completed reference forms may have a letter attached to them.
- Official copy of test results taken within the last five years documenting satisfactory performance on either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). Those who hold a master's degree are exempt from this requirement.,
- All students for whom English is not a first language must submit satisfactory scores on the Test of English as a Foreign Language (TOEFL), in addition to their MAT or GRE scores.
- A 500-1,000 word, double-spaced statement of purpose addressing the following questions: What factors in your personal and professional history have influenced you in the past and now lead you to seek admission to this program at Salem State College? What are your long-term professional goals, and how will this program help you meet them? Is there any other information that you think would help the admissions committee evaluate your application?

Additional requirements for admission to the Master of Arts in Teaching Mathematics program:

- Preliminary license includes a passing score on the Massachusetts Tests for Educator Licensure (MTEL), both the communication and literacy skills test and the subject area test appropriate for this program.
- Bachelor of Arts or Bachelor of Science degree with a major in mathematics. Students who do not have an undergraduate mathematics major or who have no teacher preparation coursework should consult with the program coordinator.
- A course in adolescent psychology

APPLICATION DEADLINES:

Rolling Admissions

PROGRAM REQUIREMENTS:

The Graduate School is currently revising this program to bring it into alignment with the new Massachusetts licensure regulations. The information on this sheet serves only as general guidelines.

Upon acceptance into the program, you will complete a **Plan of Study** in consultation with the program coordinator. You must request that any transfer credits be considered at this time. PLEASE NOTE THAT NO MORE THAN THREE COURSES TAKEN AT SALEM STATE COLLEGE BEFORE ADMISSION CAN BE COUNTED TOWARDS THIS PROGRAM. You should meet regularly with the program coordinator to discuss your progress and revise your plan of study as needed.

All candidates for the MAT Mathematics must complete 1) a minimum of 36 credit hours of graduate course work, as described below.

COURSE REQUIREMENTS: (36 Credits)

All courses are three (3) credits unless otherwise noted.

Required Education Core Courses: (9 Credits)

- EDU 808 The American High School
- EDG 705 Responding to Diversity In the Classroom
- EDU 709 Instruction and Assessment in the Secondary Classroom

Content-Based Methods Course: (3 Credits)

- MAT 702N Research on Teaching Methods in Mathematics I

Subject Matter Specialty Courses: (12 Credits)

Four mathematics courses, of which at least three are chosen from the core courses listed below. The remaining course may be selected from the core course list or from mathematics electives approved by your program coordinator.

Core Courses:

- MAT 704 Linear Algebra
- MAT 705 Modern Plane Geometry
- MAT 706 Theory of Numbers
- MAT 707 Mathematical Statistics
- MAT 711 Real Analysis I
- MAT 713 Ordinary Differential Equations
- MAT 714 Algebraic Structures
- MAT 723 Numerical Analysis
- MAT 740 Computer Applications in Mathematics I

Research Component: (6 Credits)

Choose two of the following:

- MAT 703 Research on Teaching Methods in Mathematics II
- MAT 710 Foundations of Mathematics
- MAT 747 Applied Statistical Inference
- MAT 750 History of Mathematics
- MAT 807 Statistical Inference*

Practicum Experience: (6 Credits)

- EDU 925X: Practicum in Secondary Education**

*Students taking this course for the MAT in Mathematics degree will do a research project involving successful methods of teaching mathematics.

**Candidates who already have an initial license (or are not seeking one) replace the practicum with two education or mathematics electives approved by the program coordinator.

Subsequent to publication of this flowsheet, the Graduate School reserves the right to make changes in courses, program requirements, policies and regulations as circumstances dictate. There is no guarantee that any listed course will be offered in any given semester.

Please be aware that the Commonwealth of Massachusetts may change licensure requirements. Students are advised to contact the Commonwealth for specific, current licensure requirements. Students may access that information at www.doe.mass.edu.
