

## Master of Education in Mathematics (M.Ed.)

36 Credits (non-thesis), 33 credits (thesis)  
Major Sequence and Degree Requirements

### Admission Requirements

Admission to the program is open to those applicants who possess baccalaureate degree from a regionally accredited four-year college or university. Applicants must submit supporting documents as required for general admission to a graduate program. Admission to the M.Ed. program in mathematics education is granted to those applicants whose mathematical preparation fulfills the mathematical proficiency requirement below. Conditional admission is granted to those applicants who have satisfactorily completed the following Millersville University undergraduate mathematics course or their equivalents: MATH 161, 211, 311 (Calculus I, II, III) and MATH 322 (Linear Algebra). Such persons are granted full admission status upon fulfillment of the mathematical proficiency requirement.

### Required Mathematics Proficiency

Demonstrated mathematical proficiency is required for the degree. Students who enter the program having earned a grade of B- or higher in the following undergraduate courses (or their equivalent) are considered to have met this requirement:

- MATH 322 (502) Linear Algebra I
- MATH 333 (503) Introduction to Probability and Statistics
- MATH 345 (504) Abstract Algebra I
- MATH 464 (506) Real Analysis I
- MATH 353 Survey of Geometry or MATH 355 (505) Transformational Geometry

### Mathematics courses (4 minimum)

At least 6 s.h. numbered 510 or higher:

- MATH 502 Linear Algebra for Teachers
- MATH 503 Probability and Statistics for Teachers
- MATH 504 Modern Algebra for Teachers
- MATH 505 Transformational Geometry for Teachers
- MATH 506 Modern Analysis for Teachers
- MATH 520 Logic and the Foundations of Mathematics
- MATH 535 Statistical Methods I
- MATH 536 Statistical Methods II
- MATH 537 Statistical Problem-Solving Seminar(1)
- MATH 566 Complex Variables
- MATH 577 Problems in Applied Mathematics
- MATH 592 Graph Theory
- MATH 642 Linear Algebra
- MATH 650 Topics in Geometry
- MATH 670 Operations Research
- MATH 675 Numerical Analysis
- MATH 683 General Topology
- MATH 691 Combinatorics
- MATH 693 Number Theory
- MATH 695 Topics in Mathematics

### Professional Core (3 courses)

- EDFN 601: Methods of Research  
(Note: MATH 535 may be substituted for EDFN 601)

One of the following:

- PSYC 525 : Advanced Developmental Psychology
- PSYC 526: Advanced Adolescent Psychology
- EDFN 545: Advanced Educational Psychology
- PSYC 625: Human Growth and Development  
One of the following:
- EDFN 511: Comparative Education
- EDFN 590: Social Foundations of Education
- EDFN 603: Philosophy of Education
- EDFN 604: Education and Public Policy

### Mathematics Education (4 minimum)

- MATH 603 History of Mathematics
- MATH 610 Problem-Solving Seminar
- MATH 611 Psychology of Learning Mathematics
- MATH 614 Current Issues in Middle School Mathematics
- MATH 615 Current Issues in Secondary School Mathematics
- MATH 616 Teaching Advanced Placement (AP) Calculus in Secondary School
- MATH 617 Curricular Innovations in Middle & Secondary School Mathematics
- MATH 672 Mathematical Modeling in the Secondary School Curriculum
- MATH 679 Technology in Secondary Mathematics Classroom
- MATH 697 Topics in Mathematics Education
- MATH 698 Independent Study in Mathematics Education (1-3s.h.)

### Program Coordinator:

Dr. Janet White  
Janet.White@millersville.edu

(717)-871-7320

<http://www.millersville.edu/math/>