MATHEMATICS, M.ED.

The Department of Mathematics offers graduate coursework in mathematics and mathematics education, and offers the M.Ed. in mathematics education. Courses are designed to be of optimum value and relevance to teachers of mathematics in secondary schools. Mathematics teachers who are not pursuing a degree may enroll as nondegree students and elect any course in mathematics or mathematics education for which they have the prerequisites.

Mathematics Proficiencies - MED MATH

Code	Title	Hours

Demonstrated mathematical proficiency is required for the MED Mathematics. Deficiencies will be addressed in your offer of admission. If you have met proficiency requirements, and this is not reflected as complete, your advisor should notify the College of Graduate and Professional Studies

Required Mathematics Proficiencies		
Linear Algebra Proficiency Needed		4
MATH 502	Linear Algebra	
Probability Statistics Proficiency Needed		4
MATH 503	Probability and Stats for Tchr	
Modern Algebra Proficiency Needed		3
MATH 504	Modern Algebra for Teachers	
Transformational Geometry Proficiency Needed		4
MATH 505	Classical & Modern Geometry	
Real Analysis Proficiency Needed		3
MATH 506	Modern Analysis for Teachers	
Total Hours		**18**

MED Professional Core Requirements

Code	Title	Hours
PROFESSIONAL CORE		
Methods of Research or Statistical Methods I - Choose 1 of the following:		3
EDFN 601	Research Methods	
MATH 535	Statistical Methods 1	
Psychological Core Requirement - Choose 1 of the following:		3
EDFN 545	Advanced Educational Psychology	
PSYC 525	Advanced Child Psychology	
PSYC 526	Advanced Adolescent Psychology	
PSYC 625	Human Growth and Development	
Philosophical Core Requirement - Choose 1 of the following:		3
EDFN 511	Comparative Education	
EDFN 590	Social Foundation of Educ	
EDFN 603	Philosophy of Education	
EDFN 604	Education and Public Policy	
Total Hours		**9**

Major in Mathematics Education - MED

Code	Title	Hours

No more than 2 courses numbered lower than 510 may count toward your major. A B- or better must be earned.

MATHEMATICS REQUIRED COURSES		

MATH 603 and 604 are considered equivalent courses. Credit will not be given for both.

Required Math Courses - Choose 4 of the following:		12-15
MATH 502	Linear Algebra	
MATH 503	Probability and Stats for Tchr	
MATH 504	Modern Algebra for Teachers	
MATH 505	Classical & Modern Geometry	
MATH 506	Modern Analysis for Teachers	
MATH 520	Logic and Foundations of Math	
MATH 535	Statistical Methods 1	
MATH 536	Statistical Methods 2	
MATH 566	Complex Variables	
MATH 577	Problems in Applied Math	
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 Mathematcs	
MATH 696	Independent Study	
Required Math Education Courses - Choose 3 classes from:		
MATH 602	Equity Issues in Math Ed	
MATH 603	History of Mathematics	
MATH 604	Ethnomathematics	
MATH 610	Problem Solving Seminar	
MATH 611	Learning Mathematics	
MATH 613	Elem/Sec Math Connections	
Any MATH 614-617 course(s)		
MATH 672	Math Modeling in Secondary Sch	
MATH 679	Technol in Secondary Schl Math	
MATH 697	Topics in Math Education	
MATH 698	Independent Study	
THESIS OR NON-THESIS REQUIREMENTS		
undefined - Choose 1 of the following options 1-2:		6
Option 1. Non-Thesis Option - Mathematic Electives - Choose 6 hours from:		
Any MATH 510-698 course(s)		
Option 2. Thesis Option		
MATH 699	Thesis:	
Field Experience		

All students must complete a field experience through a math education thesis or a research project in math education.

Capstone Requirement		

Comprehensive oral presentation required.

| **Total Hours** | | **18-21** |