

MATHEMATICS - MATHEMATICS EDUCATION CONCENTRATION (M.S.)

For details about this program, including program description, admission requirements, and contact information, click here (<https://www.montclair.edu/graduate/programs-of-study/mathematics-ms-mathematics-education-concentration/>).

Program Requirements

Code	Title	Credits
Core Courses		
MATH 521	Real Variables I	3
MATH 531	Abstract Algebra I	3
MATH 535	Linear Algebra I	3
MATH 540	Probability	3
Concentration Requirements		
Complete 12 credits from the following:		12
MATH 513	Educational Technology for School Mathematics	
MATH 570	Administration and Supervision of Mathematics	
MATH 571	Curriculum Construction in Mathematics	
MATH 572	Contemporary Teaching of Mathematics	
MATH 573	Mathematics Materials for Teachers of Mathematics	
MATH 574	Problem Analysis in Secondary Mathematics	
MATH 575	Special Topics in Mathematics Education	
MATH 611	Leadership Development in Mathematics Education	
MTHM 579	Applied Mathematics for the Middle Schools	
Electives		
Complete 9 credits from the list below.		9
Comprehensive Examination		
GRAD CMP	Comprehensive Examination	
In the term that you will sit for exam, register for the section which matches your major & advisor. Successfully pass exam.		
Total Credits		33

Electives

Code	Title	Credits
MATH 513	Educational Technology for School Mathematics	3
MATH 515	Intermediate Analysis I	3
MATH 516	Intermediate Analysis II	3
MATH 522	Real Variables II	3
MATH 525	Complex Variables I	3
MATH 526	Complex Variables II	3
MATH 530	Mathematical Computing	3
MATH 532	Abstract Algebra II	3
MATH 536	Linear Algebra II	3
MATH 551	Topology	3
MATH 554	Projective Geometry	3
MATH 560	Numerical Analysis	3

MATH 564	Ordinary Differential Equations	3
MATH 566	Partial Differential Equations	3
MATH 568	Applied Mathematics: Continuous	3
MATH 569	Applied Mathematics: Discrete	3
MATH 570	Administration and Supervision of Mathematics	3
MATH 571	Curriculum Construction in Mathematics	3
MATH 572	Contemporary Teaching of Mathematics	3
MATH 573	Mathematics Materials for Teachers of Mathematics	3
MATH 574	Problem Analysis in Secondary Mathematics	3
MATH 575	Special Topics in Mathematics Education	3
MATH 580	Combinatorial Mathematics	3
MATH 581	Graph Theory	3
MATH 584	Operations Research	3
MATH 585	Fundamentals of Scientific Computing	3
MATH 586	Fundamentals of Mathematical Models	3
MATH 587	Fundamentals of Optimization	3
MATH 590	Special Topics in Advanced Mathematics	3
MATH 591	Applied Industrial Mathematics	3
MATH 611	Leadership Development in Mathematics Education	3
MTHM 577	Mathematics Education in the Elementary School	3
MTHM 579	Applied Mathematics for the Middle Schools	3

Recommended Roadmap to Degree Completion

This plan is provided as an outline for students to complete their degree requirements within two years. This plan is a recommendation only and students should meet with their Graduate Advisor to develop a more individualized plan to complete their degree.

First Year

Fall	Credits	Spring	Credits
MATH 535	3	MATH 521	3
MATH 540	3	Concentration Course 2	3
Concentration Course 1	3	Elective 1	3
9		9	

Second Year

Fall	Credits	Spring	Credits
MATH 551	3	Elective 2	3
Concentration Course 3	3	Elective 3	3
Concentration Course 4	3	GRAD CMP	0.5
9		6.5	

Total Credits 33.5