MATHEMATICS EDUCATION, M.A.

The Master of Arts in Mathematics Education is designed to increase the effectiveness of teachers of mathematics at all levels of the K-12 educational program by deepening their knowledge of mathematics and some mathematics related fields while providing opportunities for obtaining information about the latest developments and programs in the field. This program also provides strong preparation in pure mathematics and computer related topics. The use of technology, computers and calculators, is stressed when appropriate.

Prerequisites for Admission

In addition to fulfilling the general graduate studies requirements for admission, the applicant must also submit evidence of a BA/BS in mathematics or the equivalent of a NJCU mathematics BA.

Requirement for Matriculation

Requirements for matriculation in the Masters of Arts in Mathematics Education are the general graduate studies requirements.

Completing the Program

To complete the M.A. in Mathematics Education a student must perform a culminating activity. There are two options. The first is to complete 32 credits, including a thesis (3 of the 32 credits); the second, to complete 35 credits of course work and achieve a passing grade on a comprehensive exam (see Culminating Activity for details of each option). Each option requires that the student receive approval by a mathematics graduate advisor for the sequence of courses to be taken.

Culminating Activity

Thesis Option

The student selecting this option selects a topic of research and applies acquired research skills in completing a creditable thesis, research report or project. Each student works with a faculty advisor and must register for MATH 661 during the semester(s) that the thesis, research report, or project is being completed. MATH 660 must have been successfully completed previously. Exceptions can only be approved by the department chairperson. Students who do not complete the thesis in MATH 661 may register one time for MATH 665 with permission of the department chairperson in order to finish. This option requires 32 credits in a sequence approved by a mathematics graduate advisor.

Requirements for the Thesis Option

Code	Title	Credits
Required Courses		
MATH 660	Research Seminar in Mathematics	2
MATH XXX	Any graduate level mathematics courses	21
MATH 661	Research Credit in Mathematics	3
Restricted Electives Courses		
Select six credits from either pair of courses:		6
MATH 620 & MATH 621	Selected Topics in Advanced Calculus I and Selected Topics Advanced Calculus II	
MATH 622 & MATH 623	Selected Topics in Abstract Algebra and Selected Topics in Linear Algebra	
Total Credits		32

NOTE: No more than three 500-level courses can be counted towards the M.A. in Mathematics Education.

Non-Thesis Option

The student electing this option is required to pass a comprehensive examination of topics and skills. A choice of questions is allowed in recognition of the fact that not all students take the same courses. Registration for this exam occurs early in the spring semester and, if needed, the exam is administered in early April of each academic year. This option requires 35 credits in a sequence approved by a graduate mathematics advisor.

Requirements For Non-Thesis Option

Code	Title	Credits
Required Courses		
MATH 660	Research Seminar in Mathematics	2
MATH XXX	Any graduate level mathematics course	27
Restricted Electives Courses		
Select six credits from either pair of courses:		6
MATH 620 & MATH 621	Selected Topics in Advanced Calculus I and Selected Topics Advanced Calculus II	
MATH 622 & MATH 623	Selected Topics in Abstract Algebra and Selected Topics in Linear Algebra	
Total Credits		35

NOTE: No more than three 500-level courses can be counted towards the M.A. in Mathematics Education.

Thesis Option

NOTE: No more than three 500-level courses can be counted towards the M.A. in Mathematics Education.

Course	Title	Credits
First Year		
Semester 1		
MATH 620 or MATH 623	Selected Topics in Advanced Calculus I or Selected Topics in Linear Algebra	3
Math 5XX or Math 6XX		3
	Credits	6
Semester 2		
MATH 621 or MATH 622	Selected Topics Advanced Calculus II or Selected Topics in Abstract Algebra	3
Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
	Credits	9
Second Year		
Semester 1		
MATH 660	Research Seminar in Mathematics	2
Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
	Credits	8
Semester 2		
MATH 661	Research Credit in Mathematics	3

Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
	Credits	9
	Total Credits	32

Non-Thesis Option

NOTE: No more than three 500-level courses can be counted towards the M.A. in Mathematics Education.

Course	Title	Credits
First Year		
Semester 1		
MATH 620 or MATH 623	Selected Topics in Advanced Calculus I or Selected Topics in Linear Algebra	3
Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
	Credits	9
Semester 2		
MATH 621 or MATH 622	Selected Topics Advanced Calculus II or Selected Topics in Abstract Algebra	3
Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
	Credits	9
Second Year		
Semester 1		
MATH 660	Research Seminar in Mathematics	2
Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
	Credits	8
Semester 2		
Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
Math 5XX or Math 6XX		3
	Credits	9
	Total Credits	35