



**CURRICULUM**  
**Master of Arts in Education major in Mathematics Teaching**  
 Academic Year 2018-2019  
 Reference CMO: CMO No. 53, s. 2007

**Curriculum Description**

Thesis programs in education aim to develop the competencies of classroom teachers and other education professionals to undertake research in specific areas within the broad field of educational science and practice. Such programs shall focus on replication, verification, validation, contextualization, and/or application of theoretical knowledge about the different aspects of the educational process.

**Program Objectives**

The Master of Arts in Education major in Mathematics Teaching (MAED-MT) aims to produce educators who:

1. demonstrate competencies in mathematics to facilitate the successful pursuit of an advanced level of proficiency in mathematics education;
2. show competence in educational pedagogy and adapt with the innovations in mathematics instruction and knowledge generation;
3. provide technical and expert leadership and/or assistance in the conduct of socio-civic activities in the community; and
4. keep track of latest trends in the field of specialization and adopt creative and innovative solutions to mathematics teaching and testing through research and advanced studies.

**Program Outcomes**

Graduates of the MAED-MT program are expected to:

1. utilize higher order skills and various methods of research in the analysis, critical assessment, and application and communication of knowledge in mathematics to everyday instruction and in the provision of meaningful learning experiences;
2. show advanced proficiency and dedication in the delivery of instruction, using a complex and coherent body of knowledge and skills in mathematics education;
3. demonstrate creativity and flexibility in applying knowledge and skills to new situations, and solve complex problems in the field through rigorous thinking and independent work;
4. apply existing knowledge and utilize proper contexts in addressing various issues that concern the teaching and learning of mathematics;
5. manifest a comprehensive understanding of the methods of inquiry in their own research or advanced scholarship, and use these methods to create and interpret knowledge in the field; and
6. continue to advance knowledge and skills in the field using the established sources of advanced information.

**Curriculum Components**

Code	Course Description	Units	Total
	<b>A. Basic Courses</b>		<b>9 units</b>
Educ 501	Research Methodology	3	
Educ 502	Educational Measurement and Statistics	3	
Educ 504	Philosophical and Social Dimensions of Education	3	
	<b>B. Major Courses</b>		<b>18 units</b>
Math 501	PreCalculus Mathematics(Algebra & Trigonometry)	3	
Math 502	Modern Plane Geometry	3	

Math 503	Mathematical Analysis I (Plane and Solid Analytic Geometry)	3	
Math 504	Mathematical Analysis II (Differential Calculus)	3	
Math 505	Mathematical Analysis III (Integral Calculus)	3	
Math 506	Differential Equations	3	
	<b>C. Electives</b>		<b>6 units</b>
Educ 509	Psychology of Teaching and Learning	3	
Math 507	Theory of Probability	3	
Math 508	The Teaching of College Mathematics	3	
	<b>D. Thesis Writing</b>		<b>9 units</b>
THESIS I	Thesis Writing I (Proposal Defense)	3	
THESIS II	Thesis Writing II (Pre-Oral Defense)		
THESIS III	Thesis Writing III (Final Defense)	6	

<b>SUMMARY</b>	
<b>Courses</b>	<b>Number of Units</b>
Basic Courses	9
Major Courses	18
Electives	6
Thesis Writing	9
<b>TOTAL</b>	<b>42</b>

### ADMISSION POLICIES

1. Automatic admission of an applicant with bachelor's degree in education major in Mathematics.
2. Non-Mathematics major applicant with less than 18 units of undergraduate Mathematics courses will be required to take the following courses (9 units) before taking the major courses.

<b>Course Code</b>	<b>Course Description</b>	<b>No. Of Unit</b>
Math 498	Advanced Algebra and Trigonometry	3 units
Math 499	Modern Plane Geometry	3 units
Math 500	Analytic Geometry	3 units

3. For non-education graduate the following courses (9 units) should be completed before enrollment in the basic courses.

<b>Course Code</b>	<b>Course Description</b>	<b>No. of Units</b>
Educ 500	Teaching Profession/ Seminar in College Teaching	3 units
Educ 509	Psychology of Teaching and Learning	3 units
Educ 510	Curriculum Development and Academic Planning	3 units