

BACHELOR OF ARTS IN MATHEMATICS WITH A MATHEMATICS EDUCATION MAJOR

Requirements for Admission into the Major:

1. Completion of 60 hours
2. Completion of all general education requirement
3. 2.5 GPA
4. Achieve the competencies of the CLAS requirement. Students in the Education major may do this by passing the General Knowledge Exam, or the Praxis I. Note: Students with a CLAS exemption must pass the FTCE General Knowledge Exam prior to admission to the program.

Curricular Requirements of the Degree

Total number of hours: **120**

UCC courses: **38/39 hours**

Common Pre-requisites:

Quantitative Reasoning:	MAC 2311	Calculus I	4
	MAC 2312	Calculus II	4
Physical Sciences:*	PHY 2048 & 2048L	Physics with Calculus I & Lab	5
	OR		
	PHY 2049 & 2049L	Physics with Calculus II & Lab	5
	OR		
	CHM 1045 & 1045L	General Chemistry I & Lab	4
	OR		
	CHM 1046 & 1046L	General Chemistry I & Lab	4
Life Sciences:*	BSC 1010 & 1010L	General Biology I & Lab	4
	OR		
	BSC 1011 & 1011L	General Biology II & Lab	4

Recommended:

Social Inquiry:	DEP 2000	Human Growth and Development	3
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Other UCC courses: 19 additional hours

* Courses suggested above satisfy both UCC and the Math/Stat department's science requirement.

Other Common Pre-Requisites: **10/11 hours**

	MAC 2313	Multivariable Calculus	4
	MAP 2302	Differential Equations	3
	COP 2210	Introduction to Programming	4
	OR		
	COP 2250	Programming in Java	3
	OR		
	CGS 2423	C for Engineers	3

Additional Lower Division Courses: **3 hours**

	MAD 2104	Discreet Mathematics	3
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Mathematics Coursework: **27 hours**

	MAE 3893	Mathematics Education Seminar ^f	1
	MAE 3894	Early Teaching Experience ^f	1
	MAS 3105	Linear Algebra	3
	MHF 3404	History of Mathematics	3
	MAA 3200	Introduction to Advanced Mathematics	3
	MAP 3103	Mathematics Modeling	3
	MAP 3103L	Mathematics Modeling Lab	1
	MAS 4203	Number Theory	3
	MAT 4510	Problem Solving Seminar	3

MTG 3212	College Geometry	3
STA 3163	Statistical Methods I	3
OR		
STA 4321	Intro to Mathematical Statistics I	3

College of Education Coursework: **28 hours**

MAE 4393	Nature of Math and Science	3
MAE 4394	Perspectives on Math and Science Education ^f	3
RED 4325	Subject Area Reading ^f	3
TSL 4324	ESOL for Content Area Teachers ^f	3
MAE 3651	Learning Mathematics with Technology	3
MAE 4330	Teaching and Learning Secondary Mathematics	4
MAE 4942	Student Teaching ^f	9

^f These courses require field experience. Please speak to your advisor regarding the requirements for field experiences.

Additional Electives: The balance of the 120 credit hour requirement for graduation should be chosen in consultation with the student's departmental and/or teacher preparation advisor(s).

Other Arts and Sciences Requirements:

1. A minimum of 120 semester hours in acceptable coursework is required.
2. At least half of the upper division credits in any major must have been taken in at FIU.
3. In the last 60 semester hours of enrollment, students must earn nine semester hours of elective credits through coursework outside the major, six of which are to be taken outside the department sponsoring the program.
4. Students must earn a grade of C or higher in all courses required for the major. A grade of C- or lower is not acceptable in any required course.
5. Of the total number of hours submitted for graduation, a minimum of 48 semester hours must be in upper division courses.
6. Students must demonstrate competency in a foreign language or in American Sign Language at the level of the second semester of a college language sequence. (High school courses cannot be used to fulfill this requirement.) This requirement may be met by successfully completing with a grade of C or better (C- does not count): a) the second semester of a two-semester sequence basic language course or b) any second-year or third-year foreign language course. This requirement may also be fulfilled by presenting acceptable scores in the Advanced Placement Exam, the SAT II, the CLEP exam, or other approved instruments. Students should consult their advisors for more specific information.
7. One- and two-credit physical activity courses (with the prefixes PEL, PEM, PEN) cannot be included as part of the hours needed for graduation.

Additional Graduation Requirements:

All majors are required to meet the following requirements before they can graduate from this teacher education program:

1. Have an overall GPA of 2.5
2. Successfully demonstrate all the Florida Educator Accomplish Practices at the pre-professional level. This is done throughout your coursework in the College of Education.
3. Pass the FTCE General Knowledge, Professional Educator, and Subject Area exams prior to graduation.

PLAN OF STUDY FOR THE MATHEMATICS EDUCATION MAJOR

FRESHMAN YEAR / FALL SEMESTER	Hours	FRESHMAN YEAR / SPRING SEMESTER	Hours
ENC 1101 Writing and Rhetoric I	3	ENC 1102 Writing and Rhetoric II	3
Quantitative Reasoning (MAC 2311 Calculus I)	4	Quantitative Reasoning (MAC 2312 Calculus II)	4
Physical Sciences (PHY 2048 & L Physics w/ Calculus I or CHM 1045 & L General Chemistry I)	4	Life Sciences (BSC 1010 & L General Biology I)	4
SLS 1501 First-Year Experience	1	Arts	3
Social Inquiry (DEP 2000 Human Growth and Development)	3		
TOTAL	15	TOTAL	14
FRESHMAN YEAR / SUMMER SEMESTER		Societies and Identities	3

SOPHOMORE YEAR / FALL SEMESTER	Hours	SOPHOMORE YEAR / SPRING SEMESTER	Hours
MAC 2313 Multivariable Calculus	4	MAP 2302 Differential Equations	3
MAE 3893 Math Education Seminar	1	MAS 3105 Linear Algebra	3
Humanities w/ Writing	3	MAE 3894 Early Teaching Experience	1
Elective	3	Humanities w/ Writing (Historically Oriented)	3
COP 2250 or COP 2210 or CGS 2423	3	Elective	3
TOTAL	14	TOTAL	13
SOPHOMORE YEAR / SUMMER SEMESTER		Elective	3

JUNIOR YEAR / FALL SEMESTER	Hours	JUNIOR YEAR / SPRING SEMESTER	Hours
MAA 3200 Intro to Advanced Math	3	MHF 3404 History of Mathematics	3
MAE 4393 Nature of Math and Science	3	MAE 3651 Learning Mathematics with Technology	3
Additional Lower Division Requirement (MAD 2104 Discrete Mathematics)	3	MAE 4394 Perspectives on Mathematics and Science Education	3
STA 3163 Statistical Methods or STA 4321 Mathematical Statistics	3	MAP 3103 & 3103L Mathematics Modeling with Lab	4
		TSL 4324 ESOL Issues and Strategies for Content Area Teachers (3)	3
TOTAL	12	TOTAL	16
JUNIOR YEAR / SUMMER SEMESTER		RED 4325 Subject Area Reading	3
		MAS 4203 Number Theory	3

SENIOR YEAR / FALL SEMESTER	Hours	SENIOR YEAR / SPRING SEMESTER	Hours
MAE 4330 Teaching and Learning Secondary Mathematics	3	MAE 4942 Student Teaching	9
Electives	6	MAT 4510 Problem Solving Seminar	3
MTG 3212 College Geometry	3		
TOTAL	12	TOTAL	12