B.A. in Mathematics: Mathematics Education Major (FIUteach)

Program Description

The Bachelor of Arts in Mathematics with a Mathematics Education Major offers you the possibility of learning rigorously and deeply the fundamental ideas and concepts of modern mathematics while developing strong analytical skills. Upon completion of this program, you will be eligible for a Mathematics (grades 6-12) Professional Teaching Certificate and be considered a highly qualified teacher. You can choose to teach, pursue graduate school or work in the various industries requiring a strong background in Mathematics.

Admission Requirements & Application

- A minimum lower-division GPA of 2.5 or better on a 4.0 scale
- Successful completion of 60 credit hours of lower-division coursework or an AA degree from an accredited institution
- A passing score on all sections of the FTCE: General Knowledge Exam (GK) *(All students must pass the General Knowledge Exam (GK) by the time they reach 72 credits in their program of study)*
- University Core Curriculum/General Education must be completed
- Major Pre-requisites (listed below) must be taken and passed with a minimum grade of C

FIU Course(s):		Credit Hours:	✓
MAC 2311	Calculus I	4	
MAC 2312	Calculus II	4	
MAC 2313	Multivariable Calculus	4	
MAP 2302	Differential Equations (Prerequisite: MAC 2312) (F,S,SS)	3	
COP 2250 **OR** COP 2210 **OR** COP 2270	Java Programming **OR** Introduction to Programming **OR** C for Engineers	3	
MAD 2104	Discrete Math (F,S,SS)	3	
MAS 3105	Linear Algebra (Prerequisite: MAC 2312) (F,S,SS)	3	
SMT 2661* AND SMT 2662*	Step 1: Inquiry Approaches to Teaching Mathematics and Science (Prerequisite: Freshman/Sophomore standing)	1	
OR	Step 2: Inquiry-Based Lesson Design in Mathematics and Science (Prerequisite: SMT 2661)	1	
SMT 2044*	1 & 2 Combined: Inquiry-Based Approaches and Lesson Design for Teaching Mathematics and Science (Prerequisite: Junior/Senior standing)	2	
Completion of TWO of the following courses with labs:			
BSC 2010	General Biology I	3	
BSC 2010L	General Biology I Lab	1	
BSC 2011	General Biology II	3	
BSC 2011L	General Biology II Lab	1	
CHM 1045	General Chemistry I	3	
CHM 1045L	General Chemistry I Lab	1	
CHM 1046	General Chemistry II	3	
CHM 1046L	General Chemistry II Lab	1	
PHY 2048	Physics with Calculus I	4	
PHY 2048L	General Physics Lab I	1	
PHY 2049	Physics with Calculus II	4	
PHY 2049L	General Physics Lab II	1	

Program of Study

The program of studies is as follows:

- Total credits:120
  - The balance of the 120 credit hour requirement for graduation should be chosen in consultation with the student's departmental and/or advisor(s)
- All courses and FTCE tests must be taken prior to student teaching
- All program courses must be completed with a minimum grade of "C"

Course:		Credit Hours:	✓
Upper Division Math and Statistics Core (25 credits)			
MAT 3501	Numbers, Functions and Modeling for Teachers (prerequisite: MAD 2104 and MAC 2312) (S)	3	
MHF 3404	History of Mathematics – *GL* (Prerequisite: MAC 2312) (F)	3	
MTG 3212	College Geometry (Prerequisite: MAC 2312) (F)	3	
MAA 3200	Introduction to Advanced Mathematics (Prerequisite: MAC 2313) (F,S,SS)	3	
MAP 4104C	Topics in Mathematical Modeling (Prerequisites: MAP 2302, MAC 2313, MAS 3105) (F)	4	
STA 4321 **OR** STA 3163	Introduction to Mathematical Statistics I (prerequisite: MAC 2313) (F) **OR** Statistical Methods I (Prerequisites: a course in Statistics or STA 2122 or MAC 2312) (F)	3	
MAS 4203	Number Theory (Prerequisite: MAA 3200, MAS 3105 or MTG 3212) (As of Fall 2023 being offered Fall Semester)	3	
MAT 4510	Problem Solving Seminar (Prerequisite: MAD 2104, MAC 2311, MAC 2312, MAC 2313, MAS 3105, MAA 3200, MTG 3212, MAS 4203) (S)	3	
Education Coursework (27 credits)			
SMT 3100	Knowing & Learning (Prerequisites or Corequisites SMT 2661 or SMT 2044) (F,S,SS)	3	
MAE 4394	Perspectives in Math and Science Education (GL) (S)	3	
SMT 4301*	Classroom Interactions (Prerequisites: SMT 3100) (F,S)	3	
RED 4325*	Subject Area Reading (F,S,SS)	3	
TSL 4324*	ESOL Issues and Strategies for Content Teachers (GL) (F,SS)	3	
SMT 4664*	Project-Based Instruction in Mathematics and Science (Prerequisites: SMT 3100 and SMT 4301) (F,S)	3	
MAE 4942*	Student Teaching (F,S)	9	

***Course require field experience hours. Other courses may also have field requirements.**

Student Teaching

All courses must be completed prior the start of student teaching and both the FTCE: Professional Exam and FTCE: Subject Area Exam must be taken, passed, and official scores received by FIU three weeks prior to student teaching. Students must be FULLY admitted to their program to apply for student teaching. Student may apply for student teaching in the Office of Field Experiences ZEB 130 by February 1st for the Fall semester student teaching and June 1st for Spring semester student teaching.

Graduation Requirements

1. FIU cumulative GPA of 2.5 or better on a 4.0 scale
2. University Foreign Language Requirement (FLENT/FLEX) must be met
3. University Summer Enrollment Requirement must be met
4. Global Learning Requirement must be met
5. 45 semester hours must be in upper division courses
6. All program and University requirements must be met

For more information on our programs visit our websites: Secondaryed.fiu.edu or FIUteach.fiu.edu

Updated 6/2020