# MATH:BA - Bachelor of Arts in Mathematics

# **Overview**

**Degree Offered** 

BA - Bachelor of Arts

**Program Title** 

**Mathematics** The Bachelor of Arts (BA) degree in Mathematics offers training in both the theory and applications of mathematics,

as well as training in pedagogy. This program is designed to prepare its graduates to become secondary school mathematics teachers.

For more information, visit the College of Arts, Sciences, and Education website.

To explore more about this program, visit the website below:

Program Website			
Academic Group	Diploma Title		
College of Arts, Sciences, and Education	Bachelor of Arts in Mathematics		
	CIP Code		
Total Credits	27.0101		
120			

# Requirements

**Simple Requisites** 

Subplan			

# No Requirement Level

All Students completing the BA in Mathematics must complete the Mathematics Education Major (FIUteach).

The following are admission requirements for major.

To qualify for admission to the program, a student must have met all the lower division requirements and must be otherwise acceptable into the program. In addition to the University Core Curriculum, Foreign Language, and Common Prerequisites, requirements include a minimum overall GPA of 2.5 for all lower-division/transfer coursework and achieve the competencies of the FTCE General Knowledge Exam.

All students must pass the GK Exam by the time they reach 72 credit hours in their program of study. All stated admission requirements are to be considered minimum.

A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.

All program requirements can be found under the "Program Requirements" section

# **Academic Progression Requirements**

Students admitted to the university are admitted directly to their chosen major. Students are expected to make satisfactory progress based on critical indicators, such as GPA in specific courses or credits earned. In cases

where students are not making satisfactory progress, a change of major may be required. Advisors work to redirect students to more appropriate majors when critical indicators are not met.

#### Degree Program Credit Hours: 120

### Туре

Prerequisite

#### **Common Prerequisites**

For a list of all state-approved common prerequisites, including alternatives, visit https://cpm.flvc.org.

#### Complete ALL of the following Courses:

- MAC2311 Calculus I
- MAC2312 Calculus II
- MAC2313 Multivariable Calc
- MAP2302 Differential Equations
- COP2250 Java Programming
  OR COP2210 Programming I
  OR COP2270 Secure C Programming For Engineers

#### Additional Common Prerequisites

#### Complete at least 1 of the following courses:

- BSC2010 General Biology I
  AND BSC2010L General Biology I Lab
- BSC2011 General Biology II: Diversity of Life, Organismal Structure and Function AND BSC2011L - General Biology Lab II
- CHM1045 General Chemistry I
  AND CHM1045L General Chemistry Lab I
- CHM1046 General Chemistry II
  AND CHM1046L General Chemistry Lab II
- PHY2048 Physics with Calculus I AND PHY2048L - General Physics Laboratory I
- PHY2049 Physics with Calculus II
  AND PHY2049L General Physics Laboratory II
- GLY1010 Physical Geology AND GLY1010L - Physical Geology Lab

# Additional Comments:

#### Courses Required for the degree

Туре

**Completion Requirement** 

Required Courses

Complete ALL of the following Courses:

- SMT2661 Step 1: Inquiry Approaches to Teaching Mathematics and Science
- SMT2662 Step 2: Inquiry-Based Lesson Design in Mathematics and Science
  OR SMT2044 Combined STEP 1 & 2: Inquiry-Based Approaches and Lesson Design for Teaching Mathematics and Science
- MAD2104 Discrete Mathematics
- MAS3105 Linear Algebra

Upper Division Math and Core Statistics Courses: 25 credits

#### Complete ALL of the following Courses:

- MAT3501 Numbers, Functions and Modeling for Teachers
- MAA3200 Intro To Adv Math
- MTG3212 College Geometry
- MHF3404 History Of Math
- MAS4203 Number Theory
- MAT4510 Problem Solving Seminar
- STA3163 Statistical Methods I
  OR STA4321 Introduction to Mathematical Statistics I
- MAP4104C Topics in Mathematical Modeling

Upper Division Education Core Courses: 27 credits

#### Complete ALL of the following Courses:

- SMT3100 Knowing, Learning, and Adolescent Development in Mathematics and Science
- MAE4394 Perspectives on Mathematics and Science Education
- RED4325 Subject Area Reading
- SMT4301 Classroom Management and Interactions for Diverse Learning Needs in STEM
- TSL4324 ESOL Issues and Strategies for Content Area Teachers
- SMT4664 Educational Assessment and Project-Based Instruction in Mathematics and Science
- MAE4942 Student Teaching

#### Additional Comments:

All Students completing the BA in Mathematics must complete the Mathematics Education Major (FIUteach)

There are no tracks, specializations, concentrations, areas of emphasis, or other curricular offerings associated with this program.