BACHELOR OF SCIENCE WITH A MAJOR IN MATHEMATICS (BS)

Degree Requirements

Hours Required

A minimum of 120 semester credit hours (SCH): 45 hours must be advanced, and fulfillment of degree requirements as specified in the "Requirements for Graduation (https://catalog.tamiu.edu/undergraduate-information/academic-regulations/)" section of this catalog.

Requirements

Code	Title	Semester Credit Hours
[University Core Curriculum] (https://catalog.tamiu.edu/appendix-a-core-curriculum-optional-course-information/)		
Select 42 SCH as outlined in the suggested plans and as specified in the "Requirements for Graduation"		42
Life & Physical Science Lab		
Select 1 SCH compatible with a Life & Physical Science course		1
Foreign Language		
Select 6 SCH in foreign language coursework (not credit by exam). Students may take 6 SCH in Spanish at the level determined by the Spanish Placement Exam or by satisfying required pre-requisites. Students may take 6 SCH of another foreign language at the introductory level or above. This requirement may also be met by earning 6 SCH in any subject while participating in a TAMIU-approved Study Abroad program while living for at least 4 weeks in another country.		6
Major		
Select 1 SCH excess in the core		1
CSCE 1136	Funds of Programming Lab	1
CSCE 1336	Fundamentals of Programming	3
MATH 3371	Communications in Mathematics	3
MATH 2414	Calculus II	4
MATH 2415	Calculus III	4
MATH 3310	Introduction to Linear Algebra	3
MATH 3330	Ordinary Diff Equations	3
MATH 3360	Statistical Analysis	3
MATH 3365	Discrete Mathematics	3
MATH 4310	Abstract Algebra I	3
MATH 4335	Advanced Calculus	3
MATH 4345	Complex Variables	3
Math Electives		
Select 15 SCH from any 4000 level MATH courses, excluding MATH 4390		15
Minor		
Select a minimum of 18 SCH from one discipline at least twelve of which must be at the 3000-4000 level. See Appendix C. Instead of a minor, students may complete 18 SCH of electives, 12 SCH of which must be at the 3000-4000 level, from any discipline, except the major field, outside the College of Nursing and Health Sciences		18
Electives		
Select 1 SCH		1
Total Semester Credit Hours		**120**

* BA/MA OPTION: See Combined BA/MA Programs in this section

Four-Year Degree Plan

Following is a suggested four-year degree plan. Students are encouraged to see their advisor each semester for help with program decisions and enrollment; responsible for reviewing the **Program of Study Requirements,** meeting all course prerequisites, and **writing intensive course (WIN)** requirements for graduation. See Academic Regulations-Undergraduate online. (https://catalog.tamiu.edu/undergraduate-information/academic-regulations/)

Freshman		
Fall		**Semester Credit Hours**
ENGL 1301	English Composition I	3
HIST 1301	The US to 1877	3
MATH 2413	Calculus I	4
UNIV 1201	Learn a Global Context I	2
Life & Physical Science		3
Life & Physical Science Lab		1
	Semester Credit Hours	**16**
Spring		
ENGL 1302	English Composition II	3
HIST 1302	The US Since 1877	3
MATH 2414	Calculus II	4
UNIV 1302	Signature Course	3
CSCE 1336	Fundamentals of Programming	3
CSCE 1136	Funds of Programming Lab	1
	Semester Credit Hours	**17**
Sophomore		
Fall		
PSCI 2305	American National Government	3
MATH 2415	Calculus III	4
MATH 3365	Discrete Mathematics	3
Life & Physical Science		3
Life & Physical Science Lab		1
	Semester Credit Hours	**14**
Spring		
PSCI 2306	American State Government	3
MATH 3310	Introduction to Linear Algebra	3
MATH 3360	Statistical Analysis	3
Creative Arts		3

Language, Philosophy & Culture		3
	Semester Credit Hours	**15**
Junior		
Fall		
MATH 3330	Ordinary Diff Equations	3
MATH 3371	Communications in Mathematics	3
MATH 4335	Advanced Calculus	3
Foreign Lang/Study Abroad		3
Social & Behavioral Science		3
	Semester Credit Hours	**15**
Spring		
MATH 4310	Abstract Algebra I	3
MATH - Advanced MATH Elective		3
Foreign Lang/Study Abroad		3
Minor/General Elective		3
Minor/General Elective		3
	Semester Credit Hours	**15**
Senior		
Fall		
MATH - Advanced Math Elective		3
MATH - Advanced Math Elective		3
MATH - Advanced Math Elective		3
Advanced Minor/General Elective		3
Advanced Minor/General Elective		3
	Semester Credit Hours	**15**
Spring		
MATH 3195	Seminar (Free Elective)	1
MATH 4345	Complex Variables	3
MATH - Advanced Math Elective		3
Advanced Minor/General Elective		3
Advanced Minor/General Elective		3
	Semester Credit Hours	**13**
	Total Semester Credit Hours	**120**

Actual degree plans may vary depending on availability of courses in a given semester.

Some courses may require prerequisites not listed.