MATHEMATICS, BS

Course Sequencing

Secondary Mathematics Teaching Track (http://catalog.tamucc.edu/undergraduate/science/teaching-certificates/mathematics-bs-grades-7-12-education-concentration/#coursesequencingtext)

Applied/Industrial Track

First Year

Fall		**Hours**
UNIV 1101	University Seminar I	1
ENGL 1301	Writing and Rhetoric I	3
MATH 2413	Calculus I	4
POLS 2305	U.S. Government and Politics	3
American History Core Requirement		3
	Hours	**14**
Spring		
UNIV 1102	University Seminar II	1
ENGL 1302 or COMM 1311	Writing and Rhetoric II or Foundation of Communication	3
MATH 2414	Calculus II	4
POLS 2306	State and Local Government	3
American History Core Requirement		3
Minor Course		3
	Hours	**17**

Second Year

Fall		
COSC 1330	Programming for Scientists, Engineers, and Mathematicians	3
MATH 2415	Calculus III	4
PHYS 2425	University Physics I	4
MATH 3313	Foundations of Number Theory	3
Language, Philosophy & Culture Core Requirement		3
	Hours	**17**
Spring		
PHYS 2426	University Physics II	4
MATH 3315	Differential Equations	3
MATH 3314	Foundations of Real Numbers	3
Minor Course		3
Creative Arts Core Requirement		3
	Hours	**16**

Third Year

Fall		
MATH 3311	Linear Algebra	3
COSC 3385	Numerical Methods	3
MATH Upper Elective		3
Minor Course		3
Elective (to meet 120 hrs)		3
	Hours	**15**
Spring		
MATH 3345	Statistical Modeling and Data Analysis	3
MATH Upper Elective		3
Minor Course		3
Social and Behavioral Sciences Core Requirement		3
Elective (to meet 120 hrs)		3
	Hours	**15**

Fourth Year

Fall		
MATH 4185	Senior Mathematics Seminar	1
MATH 4301	Introduction to Analysis	3
MATH Upper Elective		3
Minor Course		3
Elective (to meet 120 hrs)		3
	Hours	**13**
Spring		
MATH 4285	Mathematics Major Capstone	2
Minor Course		3
Elective (to meet 120 hrs)		3
Elective (to meet 120 hrs)		3
Elective (to meet 120 hrs)		3
	Hours	**14**
	Total Hours	**121**

General Mathematics Studies Track

First Year

Fall		**Hours**
UNIV 1101	University Seminar I	1
ENGL 1301	Writing and Rhetoric I	3
MATH 2413	Calculus I	4
POLS 2305	U.S. Government and Politics	3
American History Core Requirement		3
	Hours	**14**
Spring		
UNIV 1102	University Seminar II	1
ENGL 1302 or COMM 1311	Writing and Rhetoric II or Foundation of Communication	3
MATH 2414	Calculus II	4
POLS 2306	State and Local Government	3
American History Core Requirement		3
Minor Course		3
	Hours	**17**

Second Year

Fall		
COSC 1330	Programming for Scientists, Engineers, and Mathematicians	3
MATH 2415	Calculus III	4
PHYS 2425	University Physics I	4
MATH 3313	Foundations of Number Theory	3
MATH Upper Elective		3
	Hours	**17**
Spring		
PHYS 2426	University Physics II	4
MATH 3315	Differential Equations	3

MATH 3314	Foundations of Real Numbers	3
Minor Course		3
Creative Arts Core Requirement		3
	Hours	**16**
Third Year		
Fall		
MATH 3311	Linear Algebra	3
MATH 4301	Introduction to Analysis	3
MATH Upper Elective		3
Minor Course		3
Elective (to meet 120 hrs)		3
	Hours	**15**
Spring		
MATH 4306	Modern Algebra	3
MATH Upper Elective		3
Minor Course		3
Social and Behavioral Sciences Core Requirement		3
Elective (to meet 120 hrs)		3
	Hours	**15**
Fourth Year		
Fall		
MATH 4185	Senior Mathematics Seminar	1
COSC 3385	Numerical Methods	3
MATH Upper Elective		3
Minor Course		3
Language, Philosophy & Culture Core Requirement		3
	Hours	**13**
Spring		
MATH 4285	Mathematics Major Capstone	2
MATH Upper Elective		3
MATH Upper Elective		3
Minor Course		3
Elective (to meet 120 hrs)		3
	Hours	**14**
	Total Hours	**121**

Data Science and Statistics Track