

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	Writing and Rhetoric II or COMM 1311 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		Hours
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		Hours
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
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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		Hours
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	Writing and Rhetoric II or COMM 1311 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		Hours
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
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Data Science and Statistics Track