

# MATHEMATICS, BACHELOR OF ARTS

## Requirements

### General Requirements

Code	Title	Credits
Core Curriculum		42
Required Support Courses		15
Major (Required) Courses		42
Electives		21
<b>Total Credits</b>		<b>120</b>

- 36 upper-division credit hours required for degree
- 30 advanced hours from A&M-SA for residency
- Completion of this degree plan that students have as overall 2.5 GPA in upper level courses with at most two Ds.
- CIP Code: 27.0101

Code	Title	Credits
<b>Core Curriculum</b>		
ENGL 1301	Composition I	3
ENGL 1302	Composition II	3
	or ENGL 2311 Technical Writing	
MATH 1314	College Algebra	3
PHYS 1301	General Physics I	3
	or CHEM 1311 General Chemistry I	
	or BIOL 1306 Gen Biology I-Attr Living Sys	
PHYS 1302	General Physics II	3
	or CHEM 1312 General Chemistry II	
	or BIOL 1307 Gen Biology II-Biol Organisms	
Lang/Phil/Culture		3
Creative Arts		3
American History		3
American History		3
Government/Political Science		3
Government/Political Science		3
Social & Behavioral Sciences		3
SPCH 1315	Fundamentals of Public Speaking	3
	or SPCH 1318 Interpersonal Communication	
MATH 2312	Pre-Calculus	3
Subtotal:		42
<b>Required Support Courses</b>		
MATH 1014	College Algebra Recitation	0
PHYS 1101	General Physics Lab I	1
	or CHEM 1111 General Chemistry Lab I	
	or BIOL 1106 General Biology I Lab	
PHYS 1102	General Physics Lab II	1
	or CHEM 1112 General Chemistry Lab II	
	or BIOL 1107 General Biology II - Lab	
CSCI 1436	Programming Fundamentals I	4
UNIV 1301	First Year Seminar	3

Foreign Language I <sup>1</sup>	3	
Foreign Language II <sup>1,2</sup>	3	
Subtotal:	15	
<b>Major (Required) Courses <sup>3</sup></b>		
MATH 2313	Calculus I	3
MATH 2113	Calculus I Lab	1
MATH 2314	Calculus II	3
MATH 2114	Calculus II Lab	1
MATH 3320	Differential Equations	3
MATH 3325	Intro to Mathematical Proofs	3
MATH 3340	Linear Algebra with Appl	3
MATH 3370	Discrete Mathematics	3
MATH 3415	Calculus III	4
MATH 4303	Statistical Methods	3
MATH 4321	Real Variables	3
MATH 4340	Modern Algebra	3
Upper Division MATH Elective <sup>4</sup>		3
Upper Division MATH Elective <sup>4</sup>		3
Upper Division MATH Elective <sup>4</sup>		3
Subtotal:		42
<b>Electives</b>		
As needed to complete 120 credit hours required		21
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Must be one language; conversational language will not count

<sup>2</sup> Second part of Foreign Language I

<sup>3</sup> 2.5 overall GPA for major

<sup>4</sup> MATH 33XX or MATH 43XX

## Plan of Study

*This suggested plan of study is intended to be used as a guide in conjunction with official degree requirements outlined in the catalog. While this plan demonstrates a course of study that covers eight semesters, each student's academic path is unique and your timeline may look different. Students should regularly consult with academic advisors as they plan their course schedules as course offerings may vary.*

### First Year

First Semester	Credits	
MATH 1314	College Algebra	3
MATH 1014	College Algebra Recitation	0
ENGL 1301	Composition I	3
Foreign Language		3
SPCH 1315	Fundamentals of Public Speaking	3
	or SPCH 1318 or Interpersonal Communication	
HIST 1301	US History to 1865	3
<b>Credits</b>		<b>15</b>

### Second Semester

MATH 2312	Pre-Calculus	3
ENGL 1302	Composition II	3
	or ENGL 2311 or Technical Writing	
Foreign Language II		3
UNIV 1301	First Year Seminar	3

HIST 1302	US History from 1865	3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>First Semester</b>		
MATH 2313	Calculus I	3
MATH 2113	Calculus I Lab	1
Creative Arts		3
PHYS 1301	General Physics I	3
or CHEM 1311	or General Chemistry I	
or BIOL 1306	or Gen Biology I-Attr Living Sys	
PHYS 1101	General Physics Lab I	1
or CHEM 1111	or General Chemistry Lab I	
or BIOL 1106	or General Biology I Lab	
GOVT 2305	Federal Government	3
<b>Credits</b>		<b>14</b>
<b>Second Semester</b>		
MATH 2314	Calculus II	3
MATH 2114	Calculus II Lab	1
PHYS 1302	General Physics II	3
or CHEM 1312	or General Chemistry II	
or BIOL 1307	or Gen Biology II-Biol Organisms	
PHYS 1102	General Physics Lab II	1
or CHEM 1112	or General Chemistry Lab II	
or BIOL 1107	or General Biology II - Lab	
GOVT 2306	Texas Government	3
Language/Philosophy/Culture		3
Elective		3
<b>Credits</b>		<b>17</b>
<b>Third Year</b>		
<b>First Semester</b>		
MATH 3415	Calculus III	4
MATH 3325	Intro to Mathematical Proofs	3
MATH 3340	Linear Algebra with Appl	3
CSCI 1436	Programming Fundamentals I	4
Elective		3
<b>Credits</b>		<b>17</b>
<b>Second Semester</b>		
MATH 3320	Differential Equations	3
Upper Division MATH Elective		3
Elective		3
Elective		3
<b>Credits</b>		<b>12</b>
<b>Fourth Year</b>		
<b>First Semester</b>		
MATH 4303	Statistical Methods	3
MATH 4321	Real Variables	3
Upper Division MATH Elective		3
Social and Behavioral Sciences		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Second Semester</b>		
MATH 3370	Discrete Mathematics	3
MATH 4340	Modern Algebra	3

Upper Division MATH Elective	3	
Elective	3	
Elective	3	
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>120</b>