

# MATHEMATICS WITH TEACHER CERTIFICATION, BACHELOR OF SCIENCE

## Requirements

### General Requirements

Code	Title	Credits
Core Curriculum		42
Required Support Courses		9
Major (Required) Courses		39
Teacher Certification Required Courses		28
Electives		2
<b>Total Credits</b>		<b>120</b>

- Completion of this Degree Requires Admission to the Educator Preparation Program (EPP)
- 36 upper-division credit hours required for degree
- 30 advance hours from A&M-SA for residency

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
PHYS 1302	General Physics II	3
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	Fund 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
PHYS 1102	General Physics Lab II	1
CSCI 1436	Programming Fundamentals I	4
UNIV 1301	First Year Seminar	3
Subtotal:		9
<b>Major (Required) Courses</b> <sup>1,2</sup>		
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 3360	Modern Geometry	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
MATH 4350	Probability	3
Subtotal:		39
<b>Teacher Certification Required Courses</b> <sup>3,4</sup>		
EDCI 3303	Pedagogy I: Theory & Design	3
EDCI 3304	Pedagogy II: Instructional Practice	3
EDCI 3309	Educator Roles & Responsibilities	3
EDCI 3320	Analyzing Issues of Diversity	3
EDCI 3348	Managing the Learning Environment	3
EDCI 4301	Pedagogy III: Curriculum Planning	3
EDCI 4357	Math Methods: Middle School and Secondary Levels	3
EDFR 3110	Field Lab Residency I	1
EDFR 4623	Scndry Clinic Tch:Fld Res III (Unpaid semester at A&M-SA)	6
Subtotal:		28
<b>Electives</b>		
As needed to complete 120 credit hours required		2
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> 2.75 overall GPA for major

<sup>2</sup> 'C' or higher required in MATH courses

<sup>3</sup> 2.75 overall GPA

<sup>4</sup> 'C' or higher required in EDXX courses

Students who do not meet teacher preparation and certification requirements may be required to switch to a non-certification degree program.

Completion of 45 hours; all with a 'C' or better; Cumulative GPA of 2.75; Qualifying scores in Reading, Writing and Mathematics.

Code	Title	Credits
ENGL 1301	Composition I	3
ENGL 2311	Technical Writing	3
MATH 1314	College Algebra (at least)	3
An additional math course		
HIST 1301	US History to 1865	3
HIST 1302	US History from 1865	3
SPCH 1315	Fund of Public Speaking	3
or SPCH 1318	Interpersonal Communication	
2 Life & Physical Sciences		

## 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
Creative Arts		3
SPCH 1315	Fund of Public Speaking	3
or SPCH 1318	or Interpersonal Communication	
HIST 1301	US History to 1865	3

**Credits 15**

### Second Semester

MATH 2312	Pre-Calculus	3
ENGL 1302	Composition II	3
or ENGL 2311	or Technical Writing	
Lang/Phil/Culture		3
UNIV 1301	First Year Seminar	3
HIST 1302	US History from 1865	3

**Credits 15**

### Second Year

#### First Semester

MATH 2313	Calculus I	3
MATH 2113	Calculus I Lab	1
PHYS 1301	General Physics I	3
PHYS 1101	General Physics Lab I	1
Social and Behavioral Sciences		3
GOVT 2305	Federal Government	3

**Credits 14**

#### Second Semester

MATH 2314	Calculus II	3
MATH 2114	Calculus II Lab	1
PHYS 1302	General Physics II	3
PHYS 1102	General Physics Lab II	1
GOVT 2306	Texas Government	3
EDCI 3309	Educator Roles & Responsibilities	3

**Credits 14**

### Third Year

#### First Semester

MATH 3415	Calculus III	4
MATH 3325	Intro to Mathematical Proofs	3
MATH 3340	Linear Algebra with Appl	3
EDCI 3303	Pedagogy I: Theory & Design	3
Elective		2

**Credits 15**

#### Second Semester

MATH 3320	Differential Equations	3
MATH 3360	Modern Geometry	3
CSCI 1436	Programming Fundamentals I	4
EDCI 3320	Analyzing Issues of Diversity	3

EDCI 3304	Pedagogy II: Instructional Practice	3
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**Credits 16**

### Fourth Year

#### First Semester

MATH 4303	Statistical Methods	3
MATH 4321	Real Variables	3
MATH 4350	Probability	3
EDCI 3348	Managing the Learning Environment	3

**Credits 12**

#### Second Semester

MATH 3370	Discrete Mathematics	3
MATH 4340	Modern Algebra	3
EDCI 4357	Math Methods: Middle School and Secondary Levels	3
EDCI 4301	Pedagogy III: Curriculum Planning	3
EDFR 3110	Field Lab Residency I	1

**Credits 13**

#### Third Semester

EDFR 4623	Scndry Clinic Tch:Fld Res III	6
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**Credits 6**

**Total Credits 120**