

MATHEMATICS WITH TEACHER CERTIFICATION, BACHELOR OF SCIENCE

Completion of this Degree Requires Admission to the Educator Preparation Program (EPP)

- 120 credit hours required for degree
- 36 upper-division credit hours required for degree
- 30 advance hours from A&M-SA for residency

All students must complete the University's Core Curriculum (<https://catalog.tamusa.edu/undergraduate/academic-policies-procedures/core-curriculum/>) and the specific requirements of the major. In some cases, a course that is required for a major may also be counted towards the Core Curriculum.

Code	Title	Credits
Core Curriculum		
<i>Communication (010)</i>		
ENGL 1301	Composition I	3
ENGL 1302	Composition II	3
	or ENGL 2311 Technical Writing	
<i>Mathematics (020)</i>		
MATH 2313	Calculus I	3
<i>Life and Physical Sciences (030)</i>		
PHYS 2325	University Physics I (See Required Support Courses)	3
PHYS 2326	University Physics II (See Required Support Courses)	3
<i>Language, Philosophy and Culture (040)</i>		
	Lang/Phil/Culture	3
<i>Creative Arts (050)</i>		
	Creative Arts	3
<i>American History (060)</i>		
	American History	3
	American History	3
<i>Government/Political Science (070)</i>		
	Government/Political Science	3
	Government/Political Science	3
<i>Social & Behavioral (080)</i>		
	Social & Behavioral	3
<i>Component Area Option (090)</i>		
SPCH 1315	Fund of Public Speaking	3
	or SPCH 1318 Interpersonal Communication	
	Select one of the following:	3
	MATH 2312 Pre-Calculus	
	Course from List not previously used to satisfy a core component area requirement	
	Subtotal:	42
Required Support Courses		
PHYS 2125	University Physics Lab I ¹	1
PHYS 2126	University Physics Lab II ²	1

CSCI 1336	Programming Fundamentals I	3
CSCI 1136	Programming Fundamentals I Laboratory	1
UNIV 1301	First Year Seminar	3
	Subtotal:	9
Major (Required) Courses ^{3,4}		
MATH 2113	Calculus I Lab	1
MATH 2314	Calculus II	4
	& MATH 2114 and Calculus II Lab	
MATH 3320	Differential Equations	3
MATH 3325	Intro to Mathematical Proofs	3
MATH 3340	Linear Algebra with Appl	3
	or MATH 4341 Linear Alg and Matrix Theory	
MATH 3360	Modern Geometry	3
MATH 3370	Discrete Mathematics	3
MATH 3415	Calculus III	3-4
	or MATH 4370 Vector Analysis	
MATH 4303	Statistical Methods	3
MATH 4321	Real Variables	3
MATH 4340	Modern Algebra	3
MATH 4350	Probability	3
	Subtotal:	35-36
Teacher Certification Required Courses ^{5,6}		
EDCI 3303	Knowledge of Pedagogy & Assess	3
EDSE 3345	Survey of Exceptional Individuals	3
EDCI 4311	Teaching and Pedagogy for Middle School and Secondary Teachers	3
EDCI 3358	Classroom Management: Middle and Secondary Level Teachers	3
EDCI 4309	Legal and Ethical Issues in Education	3
EDCI 4357	Math Methods: Middle School and Secondary Levels	3
EDRG 4325	Disciplinary & Contnt Area Lit	3
EDFR 3110	Field Lab Residency I	1
EDFR 3120	Field Lab Residency II	1
EDFR 4623	Scndry Clinic Tch:Fld Res III (Unpaid semester at A&M-SA)	6
	Subtotal:	29
Electives		
	As needed to complete 120 credit hours required	0-1
EDRG 3389	Teach Rdg in Inter and Mid Sch ⁷	3
	Total Credits	120

- ¹ Must be taken concurrently with PHYS 2325 University Physics I
- ² Must be taken concurrently with PHYS 2326 University Physics II
- ³ 2.75 overall GPA for major
- ⁴ 'C' or higher required in MATH courses
- ⁵ 2.75 overall GPA
- ⁶ 'C' or higher required in EDXX courses
- ⁷ Recommended courses for teacher certification

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		