

# UNIVERSITY STUDIES - BS, MATHEMATICS FOR TEACHING CONCENTRATION

The BS in University Studies, Mathematics for Teaching area of concentration consists of courses that are designed to give students desiring a secondary-school teaching credential a solid foundation in mathematics.

The courses chosen for this program encompass the mathematical areas tested by the State of Texas and TExES secondary mathematics examination. These are the courses currently required for the secondary mathematics teaching field at Texas A&M University.

## Program Requirements

Code	Title	Semester Credit Hours
MATH 300	Foundations of Mathematics <sup>1</sup>	3
MATH 304	Linear Algebra <sup>1</sup>	3
	or MATH 32 or Linear Algebra	
MATH 375	Intermediate Real Analysis <sup>1</sup>	3
MATH 376	Intermediate Abstract Algebra <sup>1</sup>	3
MATH 403	Mathematics and Technology <sup>1</sup>	3
MATH 467	Modern Geometry <sup>1</sup>	3
STAT 211	Principles of Statistics I <sup>1</sup>	3
<b>University and College Requirements</b>		
PHYS 206	Newtonian Mechanics for Engineering and Science	3
POLS 206	American National Government <sup>2</sup>	3
POLS 207	State and Local Government <sup>2</sup>	3
Select one of the following:		4
MATH 147	Calculus I for Biological Sciences	
MATH 151	Engineering Mathematics I	
MATH 171	Calculus I	
Select one of the following:		4
MATH 148	Calculus II for Biological Sciences	
MATH 152	Engineering Mathematics II	
MATH 172	Calculus II	
American history ( <a href="https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> )		6
Creative arts ( <a href="https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> )		3
Communication ( <a href="https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication">https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication</a> )		6
Language, philosophy and culture ( <a href="https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> )		3

Life and physical sciences ( <a href="https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#life-physical-sciences">https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#life-physical-sciences</a> )	6
Social and behavioral sciences ( <a href="https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences">https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences</a> )	3
Minor 1	15-18
Minor 2	15-18
General Electives <sup>3</sup>	19-25
<b>Total Semester Credit Hours</b>	<b>120</b>

<sup>1</sup> Must make a grade of C or better.

<sup>2</sup> Completion of four semesters of upper-level ROTC may be substituted for three hours of the requirement.

<sup>3</sup> Select from any 100-499 course not used elsewhere, (except ALED 125; ASCC 102; ASTR 109/PHYS 109, ASTR 119/PHYS 119; BMEN 153; KINE 199; LAND 101; MATH 102-148, MATH 151-168 (<https://catalog.tamu.edu/undergraduate/course-descriptions/math/>), MATH 304, MATH 309, MATH 311, MATH 365, MATH 366, MATH 367, MATH 375, MATH 376; PBSI 301, PHYS 109/ASTR 109, PHYS 119/ASTR 119, PHYS 201, PHYS 202, PHYS 205; STAT 201, STAT 301 - 303 (<https://catalog.tamu.edu/undergraduate/course-descriptions/stat/>)).

Maximum of 3 hours of MATH 300 or CSCE 222/ECEN 222 may be used in this degree program.

Maximum of 3 hours of MATH 411 or STAT 414 may be used in this degree program.

Maximum of 4 hours of MATH 417, MATH 437 or CSCE 442 may be used in this degree program.

Graduation requirements include a requirement for 3 hours of International and Cultural Diversity (<https://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) courses and 3 hours of Cultural Discourse (<https://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) courses. A course satisfying a Core category, a college/departments requirement, or a general elective can be used to satisfy this requirement. See academic advisor.