



**Bachelor of Science (BS)**  
**Mathematics**  
*4-8, Teacher Certification*

**2025-2026**

		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL	3	Choose 1	Communication	C	010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1301	
		4	MATH 2413	Calculus I	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	Prerequisite for MATH 2412: MATH 1314/1414 with a grade of "C" or better or passing Exemption Test administered by Department of Mathematics	
		3	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1301 or HIST 2327	
		1	UTCH 1101	Inquiry Approaches to Teaching	C		Must be a Mathematics or Science Major.	A criminal background check will be required and a tuberculosis test may be required before the first field experience. Special permission from a UTeach co-director is required to enroll in UTCH 1101 and UTCH 1102 concurrently.	
		3	Choose 1	Integrative/Experiential Learning Option		090		Recommended: CSCI 1380	
		3	Choose 1	Creative Arts		050		See General Education Core for course options.	
			UNIV	1301 Learning Framework 1101 Academic and Career Success 1001/1300 Living and Working by Design				As required, based on a number of factors such as credit hours earned, TSI status, high school rank, major declaration, etc.	
17 Semester Total Hours									
SPRING		3	Choose 1	Communication	C	010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1302 or ENGL 1305	
		4	MATH 2414	Calculus II	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.		
		3	MATH 2318	Linear Algebra	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.		
		3	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1302 or HIST 2328	
		1	UTCH 1102	Inquiry-Based Lesson Design	C		UTCH 1101 with a grade of "C"	Students will begin developing their UTeach Portfolio. May be taken concurrently with UTCH 3301.	
		3	Choose 1	Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301	
17 Semester Total Hours									
		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
SECOND YEAR	FALL	3	MATH 1350	Fundamentals of Mathematics I	C		MATH 1314 or MATH 1414 with a grade of 'C' or better.		
		4	MATH 2415	Calculus III	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
		3	POLS 2305	U.S. Federal Government & Politics		070		See General Education Core for more details	
		4	Choose 1	Life and Physical Sciences		030/ 090		Recommended: PHYS 2425	
		3	Choose 1	Language, Philosophy & Culture		040		See General Education Core for course options.	
	17 Semester Total Hours								
	SPRING	3	MATH 1351	Fundamentals of Mathematics II	C		MATH 1350 with a grade of 'C' or better.		
		3	MATH 3350	Introduction to Mathematical Proof	C		MATH 2318 with a grade of 'C' or better.		
		3	POLS 2306	Texas Government & Politics		070		See General Education Core for more details	
		3	UTCH 3301	Knowing and Learning in Mathematics and Science	C		UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with UTCH 1102.		
		1	Choose 1	Integrative/Experiential Learning Option		090		See General Education Core for course options.	
4		Choose 1	Life and Physical Sciences		030/ 090		Recommended: PHYS 2426		
17 Semester Total Hours									
Student must apply to Teacher Education Program									

The 2024-2026 list of core courses can be found in the 2024-2026 Undergraduate Catalog > [www.utrgv.edu/catalog](http://www.utrgv.edu/catalog) > See 'Bachelors Degree Program Regulations'

**Symbols Key**

**Minimum Grade:** A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.  
**Bolded Course #:** Program Admission Requirement

**General Education Core (GEC) Sections:** 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Applied Communication and Literacies; 090 - Humanities; 090 - Leadership; 090 - Science Labs; 090 - Interdisciplinary; 090 - Technologies; 090 - Language Diversity & Writing.

		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR	FALL	3	MATH 3363	Modern Algebra I	C		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
		3	MATH 3352	Modern Geometry I	C		MATH 2318 with a grade of 'C' or better.	
		3	MATE 3301	Fundamentals of Middle School Mathematics	C		MATH 1351 with a grade of 'C' or better.	
		3	MATE 3321	Functions and Modeling	C		MATH 2413 (or MATH 2487) and UTCH 1102, each with a grade of 'C' or better	
		3	UTCH 3302	Classroom Interactions	C		(a) An institutional grade point average of at least 2.75, (b) UTCH 1102 with a grade of 'C' or better, (c) UTCH 3301 with a grade of 'C' or better, and (d) admission to the Teacher Education Program.	
	15 Semester Total Hours							
	SPRING	3	MATH 3341	Differential Equations	C		MATH 2414 with a grade of "C" or better.	
		3	MATH 3372	Real Analysis I	C		MATH 2414 and MATH 3350, each with a grade of 'C' or better.	
		3	MATE 3302	Fundamentals of Measurement and Geometry I	C		MATH 1351 with a grade of 'C' or better.	
		3	MATE 3304	Fundamentals of Algebraic Structures	C		MATH 1351 with a grade of 'C' or better.	
		3	STAT 3337	Probability and Statistics	C		MATH 2414 with a grade of 'C' or better.	
	15 Semester Total Hours							
			H	Course #	Course Title	Min. Grade	GEC	Prerequisite
FOURTH YEAR	FALL	3	MATE 4392	Research Methods in Middle & Secondary School Math	C		One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301	
		3	MATE 3303	Fundamentals of Measurement and Geometry II	C		MATE 3302 with a grade of 'C' or better.	
		3	MATE 3317	Perspective in Mathematics and Science	C		Grade of "C" or better in MATE 3321	
		3	READ 4305	Disciplinary Literacy in the Classrooms				
		3	UTCH 3303	Project-Based Instruction	C		UTCH 3302 with a grade of 'C' or better. Must be officially admitted to the Educator Preparation Program.	
	15 Semester Total Hours							
	All students are encouraged to meet state standards for their certification before taking UTCH 4101 & UTCH 4601.							
	SPRING	3	MATH 4390	Mathematics Project	C		Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.	
		1	UTCH 4101	Apprentice Teaching Seminar			UTCH 3303 with a grade of 'C' or better.	The final portfolio must provide evidence that the student has met state standards for teacher certification.
		6	UTCH 4601	Apprentice Teaching			UTCH 3303 with a grade of 'C' or better.	
	10 Semester Total Hours							

123 TOTAL HOURS

(42) Advanced minimum credit hours

Revised: Tuesday, February 18th, 2025