

Bachelor of Science (BS)

Mathematics

7-12, Teacher Certification

The 2026-2027 list of core courses can be found in the 2026-2027 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Bachelors Degree Program Regulations'

Symbols Key										
Campus: B - Offered in Brownsville; E - Offered in Edinburg; O - Offered Online; T - Travel Required										
Bolted Course Number*: Program Admission Requirement										
Min Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.										
Core: 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;										
Core: 090 - Applied Communication and Literacies; Humanities; Leadership; Science Labs; Interdisciplinary; Technologies; Language Diversity & Writing										
This program is delivered in a hybrid format with courses offered through a combination of face-to-face and online instruction.										
Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
1	Fall	3	B/E/O	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	
1	Fall	4	B/E/O	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	
1	Fall	3	B/E/O	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 2327	
1	Fall	1	B/E	UTCH 1101	Inquiry Approaches to Teaching	C		Must be in a College of Sciences or BS Integrated Health Sciences majors.	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.	
1	Fall	3	B/E/O	Choose 1	Integrative/Experiential Learning Option (Core)		090		Recommended: CSCI 1380	
1	Fall	3	B/E/O	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.	
1	Fall		B/E/O	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.	
1	Fall	17	Semester Total Hours							
1	Spring	3	B/E/O	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	
1	Spring	4	B/E/O	MATH 2414	Calculus II	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.		
1	Spring	3	B/E/O	MATH 2318	Linear Algebra	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.		
1	Spring	3	B/E/O	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1302 or HIST 2328	
1	Spring	1	B/E	UTCH 1102	Inquiry-Based Lesson Design	C		UTCH 1101 with a grade of "C" or better or concurrent enrollment with UTCH 3301 and College of Sciences major.	Students will begin developing their UTeach Portfolio. May be taken concurrently with UTCH 3301.	
1	Spring	3	B/E/O	Choose 1	Social and Behavioral Sciences		080		Recommended: ECON 1301 or ECON 2301	
1	Spring	17	Semester Total Hours							
Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
2	Fall	3	B	MATE 3321	Functions and Modeling	C		MATH 2413 (or MATH 2487) and UTCH 1102, each with a grade of 'C' or better.		
2	Fall	4	B/E/O	MATH 2415	Calculus III	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
2	Fall	3	B/E/O	POLS 2305	U.S. Federal Government & Politics		070		See General Education Core for more details	
2	Fall	4	B/E/O	Choose 1	Life and Physical Sciences		030/ 090		Recommended: PHYS 2425	
2	Fall	3	B/E	MATH 3350	Introduction to Mathematical Proof	C		MATH 2318 with a grade of 'C' or better.		
2	Fall	17	Semester Total Hours							
2	Spring	3	B/E/O	Choose 1	Language, Philosophy & Culture		040		See General Education Core for course options.	
2	Spring	3	B/E/O	MATH 3341	Differential Equations	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
2	Spring	3	B/E	MATH 3352	Modern Geometry I	C		MATH 2318 with a grade of 'C' or better.		
2	Spring	3	O	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.		
2	Spring	1	B/E/O	Choose 1	Integrative/Experiential Learning Option		090		See General Education Core for course options.	
2	Spring	4	B/E/O	Choose 1	Life and Physical Sciences		030/ 090		Recommended: PHYS 2426	
2	Spring	17	Semester Total Hours							
Student must apply to Teacher Education Program.										

Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
3	Fall	3	B/E	MATH 3363	Modern Algebra I	C		MATH 2318 and MATH 3350, each with a grade of 'C' or better.		
3	Fall	4	B/E	MATE 4423	Advanced Studies in Secondary Mathematics	C		MATH 3352 and MATH 3363, each with grade of 'C' or better.		
3	Fall	3	B/E	MATH 3326	History of Mathematics	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
3	Fall	3	B/E	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.		
3	Fall	13	Semester Total Hours							
3	Spring	3	B/E/O	POLS 2306	Texas Government & Politics		070		See General Education Core for more details	
3	Spring	3	B/E	MATH 3372	Real Analysis I	C		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.		
3	Spring	3	B/E	STAT 3337	Probability and Statistics	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
3	Spring	3	B/E	MATE 3322	Secondary Mathematics in a Technological Environment	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
3	Spring	3	B/E	MATH 3365	Number Theory	C		MATH 2318 and MATH 3350, each with a grade of 'C' or better.		
3	Spring	15	Semester Total Hours							
3	Summer	3	B	MATE 3317	Perspective in Mathematics and Science	C		Grade of "C" or better in MATE 3321		
3	Summer	3	Semester Total Hours							
Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
4	Fall	3	B/E	MATE 4392	Research Methods in Mid & Secondary School Math	C		One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301		
4	Fall	3	B/E	MATH 3361	Applied Discrete Mathematics	C		MATH 2318 with a grade of 'C' or better.		
4	Fall	3	B/E/O	READ 4305	Disciplinary Literacy in the Classrooms					
4	Fall	3	B/E	MATH 4390	Mathematics Project	C		Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.		
4	Fall	3	B/E	UTCH 3303	Project-Based Instruction	C		UTCH 3302 with a grade of 'C' or better. Must be officially admitted to the Educator Preparation Program.		
4	Fall	15	Semester Total Hours							
4	Spring	3	B/E	UTCH 4301	Apprentice Teaching Seminar	C		UTCH 3303 with a grade of 'C' or better and admission to clinical teaching.	UTeach requirement	
4	Spring	6	B/E	UTCH 4601	Apprentice Teaching			UTCH 3303 with a grade of 'C' or better.		
4	Spring	9	Semester Total Hours							

123 TOTAL HOURS
(42) Advanced minimum credit hours