

Bachelor of Science (BS)

Mathematics

Focus: Midde School 4th - 8th Grade UTeach Certification

		Course #	Course Title Min. Grade	GEC	Prerequisite	Additional Notes
	3	Choose 1	Communication (Core)	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1301 or ENGL 1387 (H)
!	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.	Prerequiste 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 (Core)	060		See General Education Core for more details.  Options: HIST 1301 or HIST 1387 (H)or HIST/MASC 2327
FALL	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 con
	3	Choose 1	Integrative/Experiential Learning Option (Core)	090		Recommended: CSCI 1380
AR	3	Choose 1	Creative Arts (Core)	050		See General Education Core for course options.
ST YE	17 6	UNIV 1301 mester Total Hours	Learning Framework			Only if required, based on ACT/SAT and high school rank.
<b>E</b>	17 Ser	nester I otal Hours				
	3	Choose 1	Communication (Core)	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1302 or ENGL 1388 (H) or ENGL 1305
	4	MATH 2414	Calculus II C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
RING	3	MATH 2318	Linear Algebra C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
S	3	Choose 1	American History (Core)	060		See General Education Core for more details. Options: HIST 1302 or HIST 1388 (H) or HIST/MASC 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 (Core)	080		Recommended: ECON 1301 or ECON 2301
		mester Total Hours				
	Н	Course #	Course Title Min. Grade	GEC	Prerequisite	Additional Notes
	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.	
FALL	3	Choose 1	Government/Political Science (Core)	070		See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
	4	Choose 1	Life and Physical Sciences (Core)	030/090		Recommended: PHYS 2425
EAR	3	Choose 1	Language, Philosophy & Culture (Core)	040		See General Education Core for course options.
Y Q	17 Ser	mester Total Hours				
SECON	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.	
NG	3	Choose 1	Government/Political Science (Core)	070		See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
SPRI	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 (Core)	090		See General Education Core for course options.
	4	Choose 1	Life and Physical Sciences (Core)	030/090		Recommended: PHYS 2426
	17 Ser	mester Total Hours			re courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Educ	Must apply to Teacher Education Program.

CORE: The 2019-2020 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core www.utrgv.edu/core

2019-2020

	• н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'cC' or better.	
	3	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
- IA	3	MATE 3301	Fundamentals of Middle School Mathematics	С		MATH 1351 with a grade of 'C' or better.	
	3	MATE 3321	Functions and Modeling	С		MATH 2413 (or MATH 2487) and UTCH 1102, each with a grade of 'C' or better.	
EAR	3	UTCH 3302	Classroom Interactions	С		(a) A University grade point average of at least 2.75, (b) UTCH 3301 with a grade of "C" and admission to Teacher Education Program.	
IIRD YE	15 Semester Total Hours						
弄	3	MATH 3341	Differential Equations	С		MATH 2414 ( or MATH 2488) with a grade of "C" or better.	
	3	MATH 3372	Real Analysis I	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
SPRING	3	MATE 3302	Fundamentals of Measurement and Geometry I	С		MATH 1351 with a grade of 'C' or better.	
	3	MATE 3304	Fundamentals of Algebraic Structures	С		MATH 1351 with a grade of 'C' or better.	
	3	READ 4305	Disciplinary Literacy in Content Area Classrooms				
		15 Semester Total Hours					
				Min			
	15 Se	Course #	S Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
l				Min. Grade	GEC	Prerequisite  Consent of instructor.	Additional Notes
	• н	Course #	Course Title	Grade	GEC		Additional Notes
FAII	3	Course # MATE 4319	Course Title  Research Methods in Middle School Mathematics	Grade C	GEC	Consent of instructor.	Additional Notes
YEAR	3 3	Course #  MATE 4319  MATE 3303	Course Title  Research Methods in Middle School Mathematics  Fundamentals of Measurement and Geometry II	C C	GEC	Consent of instructor.  MATE 3302 with a grade of 'C' or better.	Additional Notes
FOURTH YEAR	3 3	Course #  MATE 4319  MATE 3303  MATE 3317	Research Methods in Middle School Mathematics Fundamentals of Measurement and Geometry II Perspectives in Mathematics and Science	C C	GEC	Consent of instructor.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.	Additional Notes
FOURTH YEAR	3 3 3 3	Course #  MATE 4319  MATE 3303  MATE 3317  STAT 3337	Research Methods in Middle School Mathematics Fundamentals of Measurement and Geometry II Perspectives in Mathematics and Science Probability and Statistics Project-Based Instruction	C C C	GEC	Consent of instructor.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  MATH 2414 or (MATH 2488) with a grade of 'C' or better.	Additional Notes
FOURTH YEAR	3 3 3 3	Course #  MATE 4319  MATE 3303  MATE 3317  STAT 3337  UTCH 3303	Research Methods in Middle School Mathematics Fundamentals of Measurement and Geometry II Perspectives in Mathematics and Science Probability and Statistics Project-Based Instruction	C C C	GEC	Consent of instructor.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  MATH 2414 or (MATH 2488) with a grade of 'C' or better.	
FOURTH YEAR  FALL  FALL	3 3 3 3 3 15 Se	MATE 4319 MATE 3303 MATE 3317 STAT 3337 UTCH 3303	Research Methods in Middle School Mathematics  Fundamentals of Measurement and Geometry II  Perspectives in Mathematics and Science  Probability and Statistics  Project-Based Instruction	C C C	GEC	Consent of instructor.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  MATH 2414 or (MATH 2488) with a grade of 'C' or better.  (a) University grade point average of at least 2.75, (b) UTCH 3302 with a grade of "C".  Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH	
FOURTH YEAR	3 3 3 3 3 15 Se	Course #  MATE 4319  MATE 3303  MATE 3317  STAT 3337  UTCH 3303  mester Total Hours  MATH 4390	Research Methods in Middle School Mathematics Fundamentals of Measurement and Geometry II  Perspectives in Mathematics and Science  Probability and Statistics  Project-Based Instruction  s  Mathematics Project	C C C	GEC	Consent of instructor.  MATE 3302 with a grade of 'C' or better.  MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.  MATH 2414 or (MATH 2488) with a grade of 'C' or better.  (a) University grade point average of at least 2.75, (b) UTCH 3302 with a grade of "C".  Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.  (a) A University grade point average of at least 2.75 and UTCH 3303 with a grade of "C" or	The final portfolio must provide evidence that the student has met state standards

## Note

This program leads to a profession which requires an occupational license as defined under Texas Occupations Code 58.001. This requires that all applicants seeking to become licensed must undergo a criminal background check prior to licensure. Students in this program should check with the College of Education and P-16 Integration on the requirements for a criminal background check prior to student teaching.

## Progression requirements:

1. Admission to the College of Education and P16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 4 advanced hours, as recommended by advisor.

Graduation Requirements:

1. The student must complete all these major course requirements and all MATH and MATE courses with grades of 'C' or better and have a GPA for the major of 2.5 or better.

123 TOTAL HOURS

(61) TOTAL ADVANCED HOURS

Approved: Thursday, June 13, 2019

Revised: Monday, May 6, 2019