

Bachelor of Science (BS) 2018-2019

Mathematics

Focus: Secondary School 7th - 12th Grade UTeach Certification

	Į.	Н	А	Course #	Course Title	Min.	GEC	Prerequisite	Additional Notes
		3		Choose 1	Communication (Core)	С	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)
	1	4		MATH 2413	Calculus I	С	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
IN.		3		Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 1387 or HIST/MASC 2327
_	!	1		UTCH 1101	Inquiry Approaches to Teaching	С		TB Vaccine	
~		3		Choose 1	Integrative/Experiential Learning Option (Core)		090		Recommended: CSCI 1380
/EAF		3		Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
(TS				UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
臣		17	(0) S	emester Total Hours					
		3		Choose 1	Communication (Core)	С	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
(5	!	4		MATH 2414	Calculus II	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
SPRING	!	3		MATH 2318	Linear Algebra	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
<i>-</i>		3		Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST 1388 or HIST/MASC 2328
	1	1		UTCH 1102	Inquiry-Based Lesson Design	С		UTCH 1101 with a grade of "C"	
		3		Choose 1	Social and Behavioral Sciences (Core)		080		Recommended: ECON 1301 or ECON 2301
				emester Total Hours		Naua			
	. !	Н	Α	Course #	Course Title	IVIIN	GEC	Prerequisite	Additional Notes
	!	4		MATH 2415	Calculus III	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	!	3	(3)	MATE 3321	Functions and Modeling	С		MATH 2413 (or MATH 2487) and UTCH 1102, each 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
AR		3		Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
YE		17	(3) S	emester Total Hours			_		
COND	!	3	(3)	MATH 3350	Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
SE	1	3	(3)	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
אַפ		3		Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
SPR	1	3	(3)	UTCH 3301	Knowing and Learning in Mathematics and Science	С		UTCH 1101 and UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with consent of Uteach Advisor.	
		4		Choose 1	Life and Physical Sciences (Core)		030/090		Recommended: PHYS 2426
		1		Choose 1	Integrative/Experiential Learning Option (Core)				See General Education Core for course options
		17	(9) S	emester Total Hours					

CORE: The 2018-2019 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core www.utrgv.edu/core

Symbols Key

Critical ('!'): sequence sensitive course.

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P -Passing; S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 030 - Language Proficiency Requirement: Student is required to Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 · demonstrate language proficiency in a language other than English at 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.

the undergraduate level equivalent to a minimum of six credits.

	ļ.	Н	Α	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	(3)	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
		3	(3)	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
FALL		3	(3)	MATE 3317	Perspectives in Mathematics and Science	С		MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.	
:AR FA		3	(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.	
D YE		3	(3)	MATH 3372	Real Analysis I	С		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
噐		15	## S	emester Total Hours					
		3	(3)	MATH 3326	History of Mathematics	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		4	(4)	MATE 4423	Advanced Studies in Secondary Mathematics	С		MATH 3352 and MATH 3363, each with grade of 'C' or better.	
SPRING		3	(3)	STAT 3337	Probability and Statistics	с		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
S		3	(3)	MATE 3322	Secondary Mathematics in a Technological Environment	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3	(3)	READ 4305	Disciplinary Literacy in Content Area Classrooms				
				emester Total Hours		Ma			
		16 H		emester Total Hours Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
i	!		А			Min. Grade	GEC	MATH 2318 with a grade of 'C' or better.	Additional Notes
Ī	!	Н	(3)	Course #	Course Title	Min. Grade C	GEC		Additional Notes
Ì	!	3	A (3)	Course # MATH 3361	Course Title Applied Discrete Mathematics			MATH 2318 with a grade of 'C' or better. MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with	Additional Notes
FALL	!	3 3	A (3) (3) (3)	Course # MATH 3361 MATH 4390	Course Title Applied Discrete Mathematics Mathematics Project	С		MATH 2318 with a grade of 'C' or better. MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	Additional Notes
JRTH YEAR FALL	!	3 3 3	(3) (3) (3) (3)	Course # MATH 3361 MATH 4390 MATH 3365	Course Title Applied Discrete Mathematics Mathematics Project Number Theory	С		MATH 2318 with a grade of 'C' or better. MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2318 and MATH 3350, each with a grade of 'C' or better.	Additional Notes
FOURTH YEAR FALL	!	3 3 3 3	(3) (3) (3) (3) (3)	MATH 3361 MATH 4390 MATH 3365 MATE 4329	Course Title Applied Discrete Mathematics Mathematics Project Number Theory Research Methods in Secondary Mathematics Project-Based Instruction	c c		MATH 2318 with a grade of 'C' or better. MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2318 and MATH 3350, each with a grade of 'C' or better. MATE 3317 or PHIL 3317 with a grade of "C" or better. (a) A university grade point average of at least 2.75, (b) UTCH 3302 with a grade of 'C' or better or concurrent enrollment with UTCH 3302 with consent of UTeach	Additional Notes
FOURTH YEAR	!	3 3 3 3	(3) (3) (3) (3) (3)	Course # MATH 3361 MATH 4390 MATH 3365 MATE 4329 UTCH 3303	Course Title Applied Discrete Mathematics Mathematics Project Number Theory Research Methods in Secondary Mathematics Project-Based Instruction	c c		MATH 2318 with a grade of 'C' or better. MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2318 and MATH 3350, each with a grade of 'C' or better. MATE 3317 or PHIL 3317 with a grade of "C" or better. (a) A university grade point average of at least 2.75, (b) UTCH 3302 with a grade of 'C' or better or concurrent enrollment with UTCH 3302 with consent of UTeach	
FOURTH YEAR SPRING FALL	!	3 3 3 3 1 1 6	(3) (3) (3) (3) (3) (4) (5) (6) (6)	Course # MATH 3361 MATH 4390 MATH 3365 MATE 4329 UTCH 3303 emester Total Hours	Course Title Applied Discrete Mathematics Mathematics Project Number Theory Research Methods in Secondary Mathematics Project-Based Instruction	c c		MATH 2318 with a grade of 'C' or better. MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2318 and MATH 3350, each with a grade of 'C' or better. MATE 3317 or PHIL 3317 with a grade of "C" or better. (a) A university grade point average of at least 2.75, (b) UTCH 3302 with a grade of 'C' or better or concurrent enrollment with UTCH 3302 with consent of UTeach advisor, and (c) positive evaluation of the second-stage UTeach portfolio. (a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, (c) concurrent enrollment with UTCH 4601, (d) successful completion of PPR and content TEXES examinations, and (e) acceptance of the third-stage	

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 4101 will be required to substitute 6 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.
- 2. In addition to the graduation requirements listed in the UTRGV 2018-2019 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV department of Writing and Language Studies, and/or to six credit hours of college-level language coursework.

121 TOTAL HOURS
(62) TOTAL ADVANCED HOURS

Approved: Tuesday, April 3, 2018 Revised: Sunday, July 22, 2018