

Bachelor of Science (BS)
Mathematics

Focus: Midde School 4th - 8th Grade

Change C		Course #	Course Title	Min.			
CROSS DEL CONTROLL SUMMINION CONTROLL SET NUMBER OF CONTROLL SET NUM	· H	Course #	Course Title	Grade	GEC	Prerequisite	Additional Notes
MATH 2413 Calcular C	3	Choose 1	Communication (Core)	С	010		
Part Control	! 4	MATH 2413	Calculus I	С	020		
VICH 1101 Incquiry Approaches to Teaching C Must be a Mathematics of Science Major. Image after (Experience, Special permission from a ULPS-1107 conference) VICH 1101 and ULPS-1107 concernent) VICH 1101 and ULPS-1107 concernent VICH 1101 and ULP	3	Choose 1	American History (Core)		060		
1	FALL 1	UTCH 1101	Inquiry Approaches to Teaching	С		Must be a Mathematics or Science Major.	
UNIV 3301 tearning framework 1301 tearning framework 1	3	Choose 1			090		Recommended: CSCI 1380
Section Sect	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
A Choose 1 Communication (Core) C D10 For all I D10 courses: Satisfactory scores on English portion of ACT test and TSI examination options: ENGL 1302 or ENGL 1305 options: ENGL 1302 or ENGL 1302 or ENGL 1305 options: ENGL 1305 or ENGL 1305 options: ENGL 1305 or ENGL 1305 options: ENGL 1305 or ENGL 1305 options: ENGL 1305 options: ENGL 1305 or ENGL 1305 or ENGL 1305 options: ENGL 1305 optio	FIRST	UNIV	1101 Academic and Career Success				
See General Education Core for more details. Options: ENGL 1302 or ENGL 1302 or ENGL 1302, a grade of "C" or better in ENGL 1301. Options: ENGL 1302 or ENGL 1305 AmATH 2413 with a grade of "C" or better. I UTCH 1102 inquiry-Based Lesson Design Co. UTCH 1101 with a grade of "C" or better. I UTCH 1102 inquiry-Based Lesson Design Co. UTCH 1101 with a grade of "C" or better. Options: HIST 1302 or HIST 1	17	Semester Total Hours					
MATH 2318 Linear Algebra C MATH 2413 with a grade of "C" or better. MATH 2413 with a grade of "C" or better. MATH 2413 with a grade of "C" or better. MATH 2413 with a grade of "C" or better. MATH 2413 with a grade of "C" or better. MATH 2413 with a grade of "C" or better. MATH 2413 with a grade of "C" or better. MATH 2413 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2414 with a grade of "C" or better. MATH 2415 with a grade of "C" or better. MATH 2416 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better. MATH 2418 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102 with a	3	Choose 1	Communication (Core)	С	010		
See General Education Core for more details. Options: HIST 1320 or HIST 2328 Inquiry-Based Lesson Design C Inquiry-Based Less	: 4	MATH 2414	Calculus II	С		MATH 2413 with a grade of 'C' or better.	
Part	RING	MATH 2318	Linear Algebra	С		MATH 2413 with a grade of 'C' or better.	
Concurrently with UTCH 301. Conc	3	Choose 1	American History (Core)		060		
To Semester Total Hours House Course Cour	1 1	UTCH 1102	Inquiry-Based Lesson Design	С		UTCH 1101 with a grade of "C"	
Name			Social and Behavioral Sciences (Core)		080		Recommended: ECON 1301 or ECON 2301
MATH 1350 Fundamentals of Mathematics I C MATH 1314 or MATH 1414 with a grade of 'C' or better. MATH 2415 Calculus III C MATH 2414 with a grade of 'C' or better. POLS 2305 U.S. Federal Government & Politics O70 See General Education Core for more details Choose 1 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2425 TO MATH 1350 With a grade of 'C' or better. MATH 1350 MATH 1351 Fundamentals of Mathematics II C MATH 2318 with a grade of 'C' or better. MATH 2318 with a grade of 'C' or better. MATH 3350 Introduction to Mathematical Proof C MATH 2318 with a grade of 'C' or better. MATH 3350 Introduction to Mathematics II C MATH 2318 with a grade of 'C' or better. MATH 3350 Introduction to Mathematics II C MATH 2318 with a grade of 'C' or better. MATH 3350 Introduction to Mathematics II C MATH 2318 with a grade of 'C' or better. MATH 3350 Introduction to Mathematics II C MATH 2318 with a grade of 'C' or better. MATH 3350 See General Education Core for more details MATH 3350 Introduction to Mathematics and Science UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102. MATH 3301 See General Education Core for course options. MATH 3301 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2426			Course Title	Min.	GEC	Description	Ad Figure Nation
MATH 2415 Calculus III C MATH 2414 with a grade of 'C' or better.		Course #	Course ritte	Grade	GEC	Prerequisite	Additional Notes
Pols 2305 U.S. Federal Government & Politics 070 See General Education Core for more details Choose 1	! 3	MATH 1350	Fundamentals of Mathematics I	С		MATH 1314 or MATH 1414 with a grade of 'C' or better.	
A Choose 1 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2425 3 Choose 1 Language, Philosophy & Culture (Core) 040 See General Education Core for course options. 17 Semoster Total Hours 18 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 1 Choose 1 Integrative/Experiential Learning Option (Core) 4 Choose 1 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2426	! 4	MATH 2415	Calculus III	С		MATH 2414 with a grade of 'C' or better.	
3 Choose 1 Language, Philosophy & Culture (Core) 040 See General Education Core for course options. 17 Semester Total Hours 3 MATH 1351 Fundamentals of Mathematics II C MATH 1350 with a grade of 'C' or better. 4 Choose 1 Life and Physical Sciences (Core) 030/090 See General Education Core for course options. 040 See General Education Core for more details 040 See General Education Core for more details 040 See General Education Core for more details 040 See General Education Core for course options. 040 See General Education Core for course op	FALL 3	POLS 2305	U.S. Federal Government & Politics		070		See General Education Core for more details
To Semester Total Hours 3	4	Choose 1	Life and Physical Sciences (Core)		030/090		Recommended: PHYS 2425
MATH 1351 Fundamentals of Mathematics II C MATH 1350 with a grade of 'C' or better. MATH 3350 Introduction to Mathematical Proof C MATH 2318 with a grade of 'C' or better. MATH 3350 Texas Government & Politics O70 See General Education Core for more details UTCH 3301 Knowing and Learning in Mathematics and Science UTCH 1101 and UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102. Choose 1 Integrative/Experiential Learning Option (Core) MATH 2318 with a grade of 'C' or better. O90 See General Education Core for course options. Recommended: PHYS 2426	EA		Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
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 4 Choose 1 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2426	17	Semester Total Hours					
3 POLS 2306 Texas Government & Politics 070 See General Education Core for more details UTCH 3301 Knowing and Learning in Mathematics and Science 1 Choose 1 Integrative/Experiential Learning Option (Core) 4 Choose 1 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2426	SECO	MATH 1351	Fundamentals of Mathematics II	С		MATH 1350 with a grade of 'C' or better.	
UTCH 3301 Knowing and Learning in Mathematics and Science CTC 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	1			С		MATH 2318 with a grade of 'C' or better.	
Science 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	3	POLS 2306	Texas Government & Politics		070		See General Education Core for more details
Choose 1 (Core) See General Education Core for course options. 4 Choose 1 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2426	SPRING	01CH 3301	Science	С			
	1	Choose 1			090		See General Education Core for course options.
47 Comparing Total Harms	4		Life and Physical Sciences (Core)		030/090		
17 Semester Lotal nours Must apply to Teacher Education Program.	17	Semester Total Hours				Must apply to Teacher Education	Program.

Symbols Key

Critical ('!'): sequence sensitive course.

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

CORE: The 2022-2023 list of core courses can be found in the 2022-2023 Undergraduate Catalog: www.utrgv.edu/smartcatalog > Bachelors Degree Regulations and Graduation Policies > 'Core Curriculum'

General Education Core (GEC) Sections: 0:10 - Communication; 0:20 - Mathematics; 0:30 - Life and Physical Sciences; 0:40 - Language, Philosophy & Culture; 0:50 - Creative Arts; 0:60 - American History; 0:70 - Government/Pollitas Science; 0:30 - Social and Behavioral Sciences; 0:90 - Applied Communication and Literacies; 0:90 - Humanities; 0:90 - Language Diversity & Writing.

2022-2023

	• н	Course #	Course Title	Min. Grade			Additional Notes
	3	MATH 3363	Modern Algebra I	С		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
	3	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
FALL	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 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.	
HIRD Y	15	Semester Total Hours					
F	3	MATH 3341	Differential Equations	С		MATH 2414 with a grade of "C" or better.	
	3	MATH 3372	Real Analysis I	С		MATH 2414 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	STAT 3337	Probability and Statistics			MATH 2414 with a grade of 'C' or better.	
			•				
	15	Semester Total Hours					
	15 H	Semester Total Hours Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
			Course Title Research Methods in Mid & Secondary School Math	Min. Grade	GEC	Prerequisite One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301	Additional Notes
ľ	• н	Course #	Research Methods in Mid & Secondary		GEC		Additional Notes
FALL	3	Course # MATE 4392	Research Methods in Mid & Secondary School Math Fundamentals of Measurement and	С	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301	Additional Notes
EAR	3 3	Course # MATE 4392 MATE 3303	Research Methods in Mid & Secondary School Math Fundamentals of Measurement and Geometry II	С	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301 MATE 3302 with a grade of 'C' or better.	Additional Notes
OURTH YEAR FALL	3 3 3	Course # MATE 4392 MATE 3303 MATE 3317	Research Methods in Mid & Secondary School Math Fundamentals of Measurement and Geometry II Perspective in Mathematics and Science	С	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301 MATE 3302 with a grade of 'C' or better.	Additional Notes
FOURTH YEAR	3 3 3	MATE 4392 MATE 3303 MATE 3317 READ 4305	Research Methods in Mid & Secondary School Math Fundamentals of Measurement and Geometry II Perspective in Mathematics and Science Disciplinary Literacy in the Classrooms	C C	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301 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 FALL	3 3 3 3	MATE 4392 MATE 3303 MATE 3317 READ 4305 UTCH 3303	Research Methods in Mid & Secondary School Math Fundamentals of Measurement and Geometry II Perspective in Mathematics and Science Disciplinary Literacy in the Classrooms	C C	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301 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 FALL	3 3 3 3 3	MATE 4392 MATE 3303 MATE 3317 READ 4305 UTCH 3303 Semester Total Hours	Research Methods in Mid & Secondary School Math Fundamentals of Measurement and Geometry II Perspective in Mathematics and Science Disciplinary Literacy in the Classrooms Project-Based Instruction	C	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334, or STAT 3301 MATE 3302 with a grade of 'C' or better. MATE 3321, BIOL 3330, or PHYS 3330 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,	The final portfolio must provide evidence that the student has met state standards for teacher certification.
FOURTH YEAR Spring FALL	3 3 3 3 3	MATE 4392 MATE 3303 MATE 3317 READ 4305 UTCH 3303 Semester Total Hours MATH 4390	Research Methods in Mid & Secondary School Math Fundamentals of Measurement and Geometry II Perspective in Mathematics and Science Disciplinary Literacy in the Classrooms Project-Based Instruction Mathematics Project	C	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334, or STAT 3301 MATE 3302 with a grade of 'C' or better. MATE 3321, BIOL 3330, or PHYS 3330 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"	The final portfolio must provide evidence that the student has met

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.

Major Admission Requirements: Admission to the Teacher Education Program at the Office of Educator Preparation and Accountability is required for completion of teacher certification requirements with the undergraduate degree. All admission requirements are in accordance to Texas Administrative Code rules §227.10 and the HEA Title II accountability requirements. All applicants must meet the current certification requirements in effect at the time of application, regardless of the catalog year of degree plan.

Major Progression Requirements: 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 6 advanced hours, as recommended by advisor.

Teacher Education Program progression requirements include GPA, course grades, certification courses, benchmarks/key assessments and testing.

Major Graduation Requirements: Major requirements must be completed with a minimum grade of 'C' and a minimum GPA of 2.5.

123 TOTAL HOURS

(42) Advanced minimum credit hours

Approved: Friday, December 9, 2022 Revised: Sunday, November 13, 2022