

Bachelor of Science (BS) 2021-2022 Mathematics

Focus: Midde School 4th - 8th Grade

		:	Min		Wilde School 4th - 8th Grade	
• Н	Course #	Course Title	Grade	GEC	Prerequisite	Additional Notes
3	Choose 1	Communication (Core)	С	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	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
3	Choose 1	American History (Core)		060		See General Education Core for more details.  Options: HIST 1301 or HIST/MASC 2327
FALL 1	UTCH 1101	Inquiry Approaches to Teaching	С		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 (Core)		090		Recommended: CSCI 1380
3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
FIRST	UNIV	1301 Learning Framework 1101 Academic and Career Success 1001 Living and Working by Design				As required, based on credit hours earned, TSI status, High school rank, major declaration
17	Semester Total Hours					
3	Choose 1	Communication (Core)	С	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	С		MATH 2413 with a grade of 'C' or better.	
RING : 3	MATH 2318	Linear Algebra	С		MATH 2413 with a grade of 'C' or better.	
3	Choose 1	American History (Core)		060		See General Education Core for more details.  Options: HIST 1302 or HIST/MASC 2328
1	UTCH 1102	Inquiry-Based Lesson Design	С		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
17	Semester Total Hours  Course #	Course Title	Min.	GEC	Burne 100	ATRACAMA
' Н	Course #	Course Little	Min. Grade	GEC	Prerequisite	Additional Notes
! 3	MATH 1350	Fundamentals of Mathematics I	С		MATH 1314 or MATH 1414 with a grade of 'C' or better.	
: 4	MATH 2415	Calculus III	С		MATH 2414 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 (Core)		030/090		Recommended: PHYS 2425
3	Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
17	Semester Total Hours		ı			
) 3	MATH 1351	Fundamentals of Mathematics II	С		MATH 1350 with a grade of 'C' or better.	
! 3	MATH 3350	Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
3	POLS 2306	Texas Government & Politics		070		See General Education Core for more details
SPRIN 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 .	
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	Semester Total Hours				Must apply to Teacher Education	Program.
					he found in the 2021-2022 Undergraduate Catalog: www.utrgy.edu.> See 'Core Cu	

CORE: The 2021-2022 list of core courses can be found in the 2021-2022 Undergraduate Catalog: www.utrgv.edu > See 'Core Curriculum'

## 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 - 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.

	• 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 'C' or better.	
	3	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
į	3	MATE 3301	Fundamentals of Middle School Mathematics	С		MATH 1351 with a grade of 'C' or better.	
	3	MATE 3321/BIO 3330/PHYS 3330	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.	
HRD YI	15	Semester Total Hours					
Ė	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.	
	3 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					
	_			Min			
	• Н	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
	• н	Course #	Research Methods in Mid & Secondary		GEC		Addisonal Notes
	3	Course #  MATE 4392/BIOL 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	Course #  MATE 4392/BIOL 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
DURTH YEAR	3 3	Course #  MATE 4392/BIOL 4392  MATE 3303  MATE/PHIL 3317	Research Methods in Mid & Secondary School Math  Fundamentals of Measurement and Geometry II  Perspective in Mathematics and Science  Disciplinary Literacy in Content Area	С	GEC	One of the courses MATE 3305, STAT 3337, STAT 2334 , or STAT 3301  MATE 3302 with a grade of 'C' or better.	Addisonal Notes
FOURTH YEAR	3 3 3	MATE 4392/BIOL 4392  MATE 3303  MATE/PHIL 3317  READ 4305	Research Methods in Mid & Secondary School Math  Fundamentals of Measurement and Geometry II  Perspective in Mathematics and Science  Disciplinary Literacy in Content Area 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	3 3 3 3	MATE 4392/BIOL 4392  MATE 3303  MATE/PHIL 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 Content Area 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	3 3 3 3 3	MATE 4392/BIOL 4392  MATE 3303  MATE/PHIL 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 Content Area Classrooms  Project-Based Instruction	c c 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  (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,	Additional Notes  The final portfolio must provide evidence that the student has met state standards for teacher certification.
FOURTH YEAR	3 3 3 3 3	MATE 4392/BIOL 4392  MATE 3303  MATE/PHIL 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 Content Area Classrooms  Project-Based Instruction  Mathematics Project	c c 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  (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: Saturday, October 23, 2021 Revised: Sunday, October 3, 2021