

Bachelor of Science (BS)

Mathematics

Focus: Secondary School 7th - 12th Grade

For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI See General Education Core for more details Communication (Core) C 010 reading/writing exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL Choose 1 Options: ENGL 1301 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test Prerequiste for MATH 2412: MATH 1314/1414 with a grade of "C" or better 4 MATH 2413 Calculus I С 020 administered by the Department of Mathematics. or passing Exemption Test administered by Department of Mathematics See General Education Core for more details. 3 American History (Core) 060 Choose 1 Options: HIST 1301 or HIST/MASC 2327 A criminal background check will be required and a tuberculosis test may be 1 **UTCH 1101** С Inquiry Approaches to Teaching Must be a Math or Science Major required before the first field experience. Special permission from a UTeach co-director is required to enroll in UTCH 1101 and UTCH 1102 concurrently. 090 3 Choose 1 Integrative/Experiential Learning Option (Core) Recommended: CSCI 1380 050 Creative Arts (Core) Choose 1 See General Education Core for course options. 1301 Learning Framework As required, based on credit hours earned, TSI status, High school rank, major UNIV 1101 Academic and Career Success declaration 1001 Living and Working by Design 17 Semester Total Hours For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI See General Education Core for more details 3 Choose 1 Communication (Core) C 010 reading/writing exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL Options: ENGL 1302 or ENGL 1305 4 **MATH 2414** Calculus II С MATH 2413 with a grade of 'C' or better. **MATH 2318** С 3 Linear Algebra MATH 2413 with a grade of 'C' or better. See General Education Core for more details. 3 060 American History (Core) Choose 1 Options: HIST 1302 or HIST/MASC 2328 Students will begin developing their UTeach Portfolio. May be taken С UTCH 1102 1 Inquiry-Based Lesson Design UTCH 1101 with a grade of "C" concurrently with UTCH 3301. Choose 1 Social and Behavioral Sciences (Core) 080 Recommended: ECON 1301 or ECON 2301 17 Semester Total Hours GEC Prerequisite 4 MATH 2415 Calculus III C MATH 2414 with a grade of 'C' or better. 3 MATE 3321/BIOL/PHYS 3330 Functions and Modeling С MATH 2413 and UTCH 1102, each with a grade of 'C' or better. POLS 2305 070 3 Government/Political Science (Core) See General Education Core for more details 030/090 4 Choose 1 Life and Physical Sciences (Core) Recommended: PHYS 2425 3 MATH 3350 Introduction to Mathematical Proof С MATH 2318 with a grade of 'C' or better. 17 Semester Total Hours 3 Language, Philosophy & Culture (Core) 040 Choose 1 See General Education Core for course options. 3 MATH 3341 **Differential Equations** С MATH 2414 with a grade of 'C' or better. 3 MATH 3363 Modern Algebra I С MATH 2318 and MATH 3350, each with a grade of 'C' or better. UTCH 1101 and UTCH 1102 with a grade of "C" or better or concurrent enrollment with 3 UTCH 3301 Knowing and Learning in Mathematics and Science UTCH 1102. Choose 1 Life and Physical Sciences (Core) 030/090 Recommended: PHYS 2426 Choose 1 Integrative/Experiential Learning Option (Core) See General Education Core for course options Semester Total Hours

CORE: The 2020-2021 list of core courses can be found in the 2020-2021 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.

2020-2021

	• н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	POLS 2306	Government/Political Science (Core)		070		See General Education Core for more details
	3	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
ALL	3	MATE 3317	Perspectives in Mathematics and Science	С		MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.	
	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.	
YEAR	3	MATH 3372	Real Analysis I	С		MATH 2414 and MATH 3350, each with a grade of 'C' or better.	
IIRD '	15	Semester Total Hours					
Ė	3	MATH 3326	History of Mathematics	С		MATH 2414 with a grade of 'C' or better.	
	4	MATE 4423	Advanced Studies in Secondary Mathematics	С		MATH 3352 and MATH 3363, each with grade of 'C' or better.	
SING	3	STAT 3337	Probability and Statistics	С		MATH 2414 with a grade of 'C' or better.	
SPF	3	MATE 3322	Secondary Mathematics in a Technological Environment	С		MATH 2414 with a grade of 'C' or better.	
	3	READ 4305	Disciplinary Literacy in Content Area Classrooms				
	16	Semester Total Hours					
	16 · H	Semester Total Hours  Course #	Course Title	Min. Grade	GEC	Preroquisite	Additional Notes
ì	16 · H		Course Title  Applied Discrete Mathematics	Min. Grade		Prerequisite  MATH 2318 with a grade of 'C' or better.	Additional Notes
	• н	Course #		Grade			Additional Notes
FALL	3	Course #	Applied Discrete Mathematics	Grade C		MATH 2318 with a grade of 'C' or better.  Prerequisites: Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH	Additional Notes
H YEAR FALL	3 3	Course #  MATH 3361  MATH 4390	Applied Discrete Mathematics  Mathematics Project	C C		MATH 2318 with a grade of 'C' or better.  Prerequisites: Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.	Additional Notes
FOURTH YEAR FALL	3 3	Course #  MATH 3361  MATH 4390  MATH 3365	Applied Discrete Mathematics  Mathematics Project  Number Theory  Research Methods in Middle & Secondary School	C C C		MATH 2318 with a grade of 'C' or better.  Prerequisites: Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.  MATH 2318 and MATH 3350, each with a grade of 'C' or better.	Additional Notes
FOURTH YEAR	3 3 3 3	MATH 3361  MATH 4390  MATH 3365  MATE/BIOL/PHYS 4392	Applied Discrete Mathematics  Mathematics Project  Number Theory  Research Methods in Middle & Secondary School Math	C C C		MATH 2318 with a grade of 'C' or better.  Prerequisites: Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.  MATH 2318 and MATH 3350, each with a grade of 'C' or better.  One of the courses MATE 3305, STAT 3337, STAT 2334, or STAT 3301  (a) A University grade point average of at least 2.75 and UTCH 3302 with a grade of "C"	Additional Notes
FOURTH YEAR	3 3 3 3	MATH 3361  MATH 4390  MATH 3365  MATE/BIOL/PHYS 4392  UTCH 3303	Applied Discrete Mathematics  Mathematics Project  Number Theory  Research Methods in Middle & Secondary School Math	C C C		MATH 2318 with a grade of 'C' or better.  Prerequisites: Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.  MATH 2318 and MATH 3350, each with a grade of 'C' or better.  One of the courses MATE 3305, STAT 3337, STAT 2334, or STAT 3301  (a) A University grade point average of at least 2.75 and UTCH 3302 with a grade of "C"	
FOURTH YEAR SPRING FALL	3 3 3 3	MATH 3361  MATH 4390  MATH 3365  MATE/BIOL/PHYS 4392  UTCH 3303  Semester Total Hours	Applied Discrete Mathematics  Mathematics Project  Number Theory  Research Methods in Middle & Secondary School Math  Project-Based Instruction	C C C		MATH 2318 with a grade of 'C' or better.  Prerequisites: Credit for or concurrent enrollment in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.  MATH 2318 and MATH 3350, each with a grade of 'C' or better.  One of the courses MATE 3305, STAT 3337, STAT 2334, or STAT 3301  (a) A University grade point average of at least 2.75 and UTCH 3302 with a grade of "C" or better.	The Final Portfolio must provide evidence that the student has met state

## 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 4101 will be required to substitute 6 advanced hours, as recommended by advisor.

Major Graduation Requirements: 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.

121 TOTAL HOURS

Approved: Thursday, February 4, 2021

(42) nced Institutional minimum credit hours Revised: Tuesday, November 17, 2020