

	I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FALL		3	Choose 1	Communication (Core)	C	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. <b>Options: ENGL 1301</b>
		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.	
		3	Choose 1	American History (Core)		060		See General Education Core for more details. <b>Options: HIST 1301 or HIST 2327</b>
		3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options.
		3	PHYS 1311	Learning to be a Physicist				Physics core requirement.
		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 concurrently.
			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.
	<b>17 Semester Total Hours</b>							
SPRING		3	Choose 1	Communication (Core)		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. <b>Options: ENGL 1302 or ENGL 1305</b>
		4	MATH 2414	Calculus II	C		MATH 2413 with a grade of 'C' or better.	
		4	PHYS 2425	Physics for Scientists and Engineers I		030/090	MATH 2413 and concurrent enrollment in MATH 2414.	
		3	Choose 1	American History (Core)		060		See General Education Core for more details. <b>Options: HIST 1302 or HIST 2328</b>
		3	CSCI 1380	Computer Science I		090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	
		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.
	<b>18 Semester Total Hours</b>							
FALL		4	MATH 2415	Calculus III			MATH 2414 with a grade of 'C' or better.	
		3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
		4	PHYS 2426	Physics for Scientists and Engineers II		030/090	PHYS 2425.	
		3	PHYS 2327	Physics for Scientists and Engineers III			PHYS 2425. Students may take this course concurrently with PHYS 2426.	See General Education Core for more details.
		3	POLS 2305	U.S. Federal Government & Politics		070		See General Education Core for more details.
		<b>17 Semester Total Hours</b>						
SPRING		3	MATH 3341	Differential Equations			MATH 2414 and MATH 2318 with a grade of 'C' or better.	
		4	PHYS 3402	Modern Physics			PHYS 2426 and PHYS 2327.	Physics core requirement. Only offered in the Spring Semester.
		3	BIOL 3330/MATE 3321	Functions and Modeling			A grade of 'C' or better in the following: MATH 2413 and UTCH 1102.	UTeach requirement
		3	POLS 2306	Texas Government & Politics		070		See General Education Core for more details.
		3	Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
		1	Choose 1	Integrative/Experiential Learning Option (Core)		090		See General Education Core for course options.
	<b>17 Semester Total Hours</b>							
	<b>Must apply to Teacher Education Program.</b>							

**CORE: The 2023-2024 list of core courses can be found in the 2023-2024 Undergraduate Catalog: [www.utrgv.edu/smartcatalog](http://www.utrgv.edu/smartcatalog) > Bachelors Degree Regulations and Graduation Policies > '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.

	F	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR	FALL	3	PHYS 3305	Classical Mechanics			PHYS 2426 and MATH 2415.	Physics core requirement.
		4	PHYS 3411	Math Methods for Physics I			MATH 3341	Physics core requirement.
		3	MATE 3317	Perspective in Mathematics and Science			MATE 3321, BIOL 3330, or PHYS 3330 with a grade of "C" or better.	UTeach requirement
		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 with consent of UTeach Advisor.	UTeach requirement
		3	PHYS 3303	Thermodynamics			MATH 2415 and PHYS 2426 and PHYS 2327	Physics core requirement.
<b>16 Semester Total Hours</b>								
THIRD YEAR	SPRING	3	UTCH 3302	Classroom Interactions	C		(a) University grade point average of at least 2.75, (b) UTCH 1102 with a grade of 'C' or better, (c) UTCH 3301 with a grade of 'C' or better, and (d) admission to the Teacher Education Program.	UTeach requirement
		3	PHYS 4305	Statistical Mechanics			PHYS 3303 and PHYS 3311.	Physics core requirement.
		1	PHYS 4101	Laboratory Research			Consent of instructor.	Physics core requirement.
		3	PHYS 3304	Optics			MATH 2415 and PHYS 2426 and PHYS 2327.	Physics core requirement. Only offered in the Spring Semester.
		3	READ 4305	Disciplinary Literacy in the Classrooms				
<b>13 Semester Total Hours</b>								
	F	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3	PHYS 3301	Electromagnetic Theory I			MATH 2415 and PHYS 2426.	Physics core requirement.
		3	PHYS 4303	Quantum Mechanics I			PHYS 3305 and PHYS 3311.	Physics core requirement.
		3	BIOL/MATE 4392	Research Methods in the Science and Mathematics Classroom (UTEACH) or Research Methods in Middle and Secondary School Math			Grade C or better in the following: MATH 2413 and UTCH 1102.	UTeach requirement
		3	UTCH 3303	Project-Based Instruction	C		(a) University grade point average of at least 2.75, (b) UTCH 3302 with a grade of "C".	UTeach requirement
		3	PHYS 4300	Undergraduate Research Project			Senior standing in the Physics Degree Program and consent of a supervising faculty member.	Capstone
<b>15 Semester Total Hours</b>								
FOURTH YEAR	SPRING	1	UTCH 4101	Apprentice Teaching Seminar	C		(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, acceptance of the UTeach Portfolio.	UTeach requirement
		6	UTCH 4601	Apprentice Teaching	C		(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, acceptance of the UTeach Portfolio.	UTeach requirement
<b>7 Semester Total Hours</b>								

**Program Overview**

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**

Teacher Education Program progression requirements include GPA, course grades, certification courses, benchmarks/key assessments and testing. Admission to the College of Education and P-16 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 7 hours, as recommended by advisor. A Physics Major with Physics/Mathematics (7-12) Teacher Certification would initially focus on the Math prerequisites courses (support courses listed above), in taking the PHYS 2425/2426 course sequence, and in taking the UTCH 1101 and UTCH 1102 course sequence.

**120 TOTAL HOURS**

**(42) Advanced minimum credit hours**

Approved: Thursday, March 23, 2023

Revised: Thursday, March 23, 2023