

Concentration: Educational Physics											
FIRST YEAR	I		H	Course #	Course Title	Min. Grade	SEC	Prerequisite	Additional Notes		
		3		Choose 1	Communication (Core)		C	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams 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		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. Options: HIST 1301 or HIST/MASC 2327	
		3		Choose 1	Social and Behavioral Sciences (Core)			080		See General Education Core for course options.	
		3		Choose 1	Creative Arts (Core)			050		See General Education Core for course options.	
		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	
	17 Semester Total Hours										
	SPRING		3		Choose 1	Communication (Core)			010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams 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		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. Options: HIST 1302 or HIST/MASC 2328
		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.	
18 Semester Total Hours											
SECOND YEAR	I		H	Course #	Course Title	Min. Grade	SEC	Prerequisite	Additional Notes		
		4		MATH 2415	Calculus III				MATH 2414 with a grade of 'C' or better.		
		3		Choose 1	Language, Philosophy & Culture (Core)			040		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		PHYS/BIOL 3330 or MATE 3321	Functions and Modeling				A grade of 'C' or better in the following: MATH 2413 and UTCH 1102.	UTeach requirement	
	17 Semester Total Hours										
	SPRING		3		MATH 3341	Differential Equations				MATH 2414 and MATH 2318 with a grade of 'C' or better.	
			3		MATE/PHIL 3317	Perspective in Mathematics and Science					UTeach requirement
			4		PHYS 3402	Modern Physics				PHYS 2426 and PHYS 2327.	Physics core 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		POLS 2305	Government/Political Science (Core)			070		See General Education Core for more details
			1		Choose 1	Integrative/Experiential Learning Option (Core)			090		See General Education Core for course options.
17 Semester Total Hours									Must apply to Teacher Education Program.		

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.

	I	H	Course #	Course Title	PHYS	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 Physicist I			MATH 3341	Physics core requirement.
		3	PHYS 3303	Thermodynamics			MATH 2415 and PHYS 2426 and PHYS 2327	Physics core requirement.
		3	UTCH 3302	Classroom Interactions	C		(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.	UTeach requirement
		3	POLS 2306	Government/Political Science (Core)		070		See General Education Core for more details
		16 Semester Total Hours						
THIRD YEAR	SPRING	3	xxxx x3xx	Free Elective				
		3	PHYS 4305	Statistical Mechanics			PHYS 3303 and PHYS 3311.	Physics core requirement.
		1	PHYS 4101	Senior Laboratory Research			Consent of instructor.	Physics core requirement.
		3	READ 4305	Disciplinary Literacy in Content Area Classrooms				
		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
		13 Semester Total Hours						
FOURTH YEAR	FALL	3	PHYS 3304	Optics			MATH 2415 and either PHYS 2412 or PHYS 2426.	Physics core requirement.
		3	PHYS 3301	Electromagnetic Theory I			MATH 2415 and either PHYS 2426 or PHYS 2412.	Physics core requirement.
		3	PHYS 4303	Quantum Mechanics I			PHYS 3305 and PHYS 3311.	Physics core requirement.
		3	PHYS 4300	Undergraduate Research			Senior standing in the Physics Degree Program and consent of a supervising faculty member.	Capstone
		3	PHYS/Biol/MATE 4392	Research Methods			Grade C or better in the following: MATH 2413 and UTCH 1102.	UTeach requirement
		15 Semester Total Hours						
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, © 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, © concurrent enrollment with UTCH 4601, (d) successful completion of PPR and content TExES examinations, acceptance of the UTeach Portfolio.	UTeach requirement
		7 Semester Total Hours						

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

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 1101/1102 course sequence.

120 TOTAL HOURS

(42) Advanced Institutional minimum credit hours

Approved: Wednesday, November 25, 2020

Revised: Tuesday, November 24, 2020