

	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FIRST YEAR 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>
	3	CHEM 1311	General Chemistry I (Core)		030	MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, MATH 2413 with a grade of "C" or higher."	
	1	CHEM 1111	General Chemistry I Lab (Core)		090	Credit/registration in CHEM 1311	
	3	POLS 2305	U.S. Federal Government & Politics (Core)		070		See General Education Core for more details.
	4	MATH 2413	Calculus I (Core)	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	1	UTCH 1101	Inquiry Approaches to Teaching	C		Criminal background check and TB vaccine. Must be a Mathematics or Science Major	
		UNIV	1301 Learning Framework Academic and Career Success and Working by Design	1101 1001 Living			As required, based on credit hours earned, TSI status, High school rank, major declaration
<b>15 Semester Total Hours</b>							
FIRST YEAR SPRING	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 1302 or ENGL 1305</b>
	3	CHEM 1312	General Chemistry II (Core)		030	CHEM 1311.	
	1	CHEM 1112	General Chemistry II Lab (Core)		090	Credit/registration in CHEM 1312.	
	4	MATH 2414	Calculus II			MATH 2413 with a grade of 'C' or better.	
	3	POLS 2306	Texas Government & Politics		070		See General Education Core for more details.
	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
1	UTCH 1102	Inquiry-Based Lesson Design	C		UTCH 1101 with a grade of "C" or better or concurrent enrollment with UTCH 3301.		
<b>18 Semester Total Hours</b>							
SECOND YEAR FALL	3	CHEM 2323	Organic Chemistry I			Prerequisite: CHEM 1312	
	1	CHEM 2123	Organic Chemistry I Lab			Prerequisite: CHEM 1112	
	3	Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
	3	Choose 1	American History (Core)		060		See General Education Core for more details. <b>Options: HIST 1301 or HIST 2327</b>
	4	PHYS 1401	General Physics I			MATH 1414 or MATH 1314, MATH 2412 or MATH 2413	
	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.	
<b>17 Semester Total Hours</b>							
SECOND YEAR SPRING	3	CHEM 2325	Organic Chemistry II			CHEM 2323	
	1	CHEM 2125	Organic Chemistry II Lab			CHEM 2325	
	3	Choose 1	American History (Core)		060		See General Education Core for more details. <b>Options: HIST 1302 or HIST 2328</b>
	3	Choose 1	Integrative/Experiential Learning Option (Core)		090		See General Education Core for course options.
	3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options.
	3	BIOL 3330	Functions and Modeling			A grade of 'C' or better in the following: MATH 2413 and UTCH 1102.	
<b>16 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.

	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FALL	3	CHEM 3303 or CHEM 3387	Biochemistry I or Biochemistry I Honors				
	1	CHEM 3103	Biochemistry I Lab			CHEM 3303.	
	3	CHEM 2301	Analytical Chemistry			CHEM 1312 and CHEM 1112.	
	1	CHEM 2101	Analytical Chemistry Lab			CHEM 2301	
	4	PHYS 1402	General Physics II			PHYS 1401.	
	3	BIOL 4392	Research Methods in the Science and Mathematics Classroom (UTeach)			Grade C or better in the following: MATH 2413 and UTCH 1102.	
<b>15 Semester Total Hours</b>							
SPRING	3	CHEM 3301	Inorganic Chemistry			12 hours of chemistry, including CHEM 2323.	
	1	CHEM 3101	Inorganic Chemistry Lab			Credit/registration in CHEM 3301.	
	3	CHEM 4304	Instrumental Analysis			CHEM 2301 and CHEM 2101.	
	1	CHEM 4104	Instrumental Analysis Lab			CHEM 4304.	
	3	CHEM 3304	Physical Chemistry I			PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH 2414	
	1	CHEM 3104	Physical Chemistry I Lab			Credit/registration in CHEM 3304.	
	3	READ 4305	Disciplinary Literacy in the Classroom				
	3	UTCH 3302	Classroom Interactions	C		(a) An institutional grade point average of at least 2.75, (b) UTCH 1102 with a grade of "C" or better, © UTCH 3301 with a grade of "C" or better, and Admission to Teacher Educator Program	
<b>18 Semester Total Hours</b>							
FALL	3	CHEM 3305	Physical Chemistry II			CHEM 3304	
	1	CHEM 3105	Physical Chemistry II Lab			Credit/registration in CHEM 3305.	
	3	CHEM 4305	Chemistry Capstone			Chemistry major with senior standing or consent of instructor	
	2	CHEM 4201	Chemistry Problems I			Chemistry major with junior standing or consent of instructor.	
	3	PHIL 3317	Perspectives on Science and Mathematics			Minimum grade of "C" in one of the following: BIOL 3330	
	3	UTCH 3303	Project-Based Instruction			UTCH 3302 with a grade of "C" or better	
	<b>15 Semester Total Hours</b>						
SPRING	6	UTCH 4601	Apprentice Teaching			(a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, (c) successful completion of PPR and content TEXES examinations	
	1	UTCH 4101	Apprentice Teaching Seminar			(a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, co-requisite: UTCH 4601,	
<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.

Students receiving the BS Degree in Chemistry with Teacher Certification can continue their academic studies into masters or doctoral programs in Chemistry, can use the degree to find employment as a chemist, or can enter a career as a secondary school teacher of chemistry. The Chemistry degree is certified by the American Chemical Society.

#### Major Admissions Requirements

##### 1. Admission requirements required for this program beyond university 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 4601, 4101). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute hours, as recommended by advisor.

**121 TOTAL HOURS**

**(42) Advanced minimum credit hours**

Approved: Monday, March 27, 2023

Revised: Monday, March 27, 2023