



**Bachelor of Science (BS)**  
**Chemistry**  
**7-12, Teacher Certification**

**2025-2026**

	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FIRST YEAR	FALL	3	<b>Choose 1</b>	C	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	See General Education Core for more details Options: ENGL 1301
		3	CHEM 1311		030	MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, MATH 2413 with a grade of "C" or higher."	
		1	CHEM 1111		090	Credit/registration in CHEM 1311	
		3	POLS 2305		070		See General Education Core for more details.
		4	MATH 2413	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
		1	<b>UTCH 1101</b>	C		Must be in a College of Sciences major.	
	SPRING		UNIV 1301 Learning Framework 1101 Academic and Career Success 1001/1300 Living and Working by Design				As required, based on a number of factors such as credit hours earned, TSI status, high school rank, major declaration, etc.
		<b>15 Semester Total Hours</b>					
		3	<b>Choose 1</b>	C	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	See General Education Core for more details Options: ENGL 1302 or ENGL 1305
		3	CHEM 1312		030	CHEM 1311.	
		1	CHEM 1112		090	Credit/registration in CHEM 1312.	
		4	MATH 2414			MATH 2413 with a grade of 'C' or better.	
SECOND YEAR	FALL	3	POLS 2306		070		See General Education Core for more details.
		3	Choose 1		050		See General Education Core for course options.
		1	<b>UTCH 1102</b>	C		UTCH 1101 with a grade of 'C' or better.	
		<b>18 Semester Total Hours</b>					
	SPRING	3	CHEM 2323			CHEM 1312.	
		1	CHEM 2123			CHEM 1112.	
		3	Choose 1		040		See General Education Core for course options.
		3	Choose 1		060		See General Education Core for more details. Options: HIST 1301 or HIST 2327
		4	PHYS 1401		090	MATH 1414 or MATH 1314, MATH 2412 or MATH 2413	
		3	<b>UTCH 3301</b>	C		UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with <b>UTCH 1102</b> .	
	SPRING	<b>17 Semester Total Hours</b>					
		3	CHEM 2325			CHEM 2323.	
		1	CHEM 2125			CHEM 2325.	
		3	Choose 1		060		See General Education Core for more details. Options: HIST 1302 or HIST 2328
		3	Choose 1		090		See General Education Core for course options.
		3	Choose 1		080		See General Education Core for course options.
		2	XXXX-XXXX				
		<b>15 Semester Total Hours</b>					

The 2024-2026 list of core courses can be found in the 2024-2026 Undergraduate Catalog: [www.utrgv.edu/catalog](http://www.utrgv.edu/catalog) > See 'Bachelors Degree Program Regulations'

**Symbols Key**

**Minimum Grade:** A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.  
**Bolded Course #:** Program Admission Requirement

**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
THIRD YEAR	FALL	3	CHEM 3303 or CHEM 3387	Biochemistry I or Biochemistry I Honors			CHEM 2323.	
		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.	
	12 Semester Total Hours							
	SPRING	3	CHEM 3304	Physical Chemistry I			PHYS 1402; MATH 2413 with a grade of "C" or better and pre or co-requisites in <u>MATH 2414</u> .	
		1	CHEM 3104	Physical Chemistry I Lab			CHEM 3304.	
		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, (c) UTCH 3301 with a grade of 'C' or better, and (d) admission to the Teacher Education Program.	
		3	CHEM 3301	Inorganic Chemistry			12 hours of chemistry, including CHEM 2323.	
		1	CHEM 3101	Inorganic Chemistry Lab			CHEM 3301.	
		3	CHEM 4304	Instrumental Analysis			CHEM 2301 and CHEM 2101.	
		1	CHEM 4104	Instrumental Analysis Lab			CHEM 4304.	
	15 Semester Total Hours							
SUMMER	3	BIOL 4392	Research Methods in the Science and Mathematics Classroom (UTeach)			Grade C or better in the following: MATH 2413 and UTCH 1102.		
	3	READ 4305	Disciplinary Literacy in the Classroom					
6 Semester Total Hours								
		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3	CHEM 3305	Physical Chemistry II			CHEM 3304	
		1	CHEM 3105	Physical Chemistry II Lab			CHEM 3304.	
		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			Credit of "C" or better or registration in UTCH 3302.	
		3	UTCH 3303	Project-Based Instruction			UTCH 3302 with a grade of 'C' or better. Must be officially admitted to the Educator Preparation Program.	
	15 Semester Total Hours							
	SPRING	6	UTCH 4601	Apprentice Teaching			UTCH 3303 with a grade of 'C' or better.	
		1	UTCH 4101	Apprentice Teaching Seminar			UTCH 3303 with a grade of 'C' or better.	
	7 Semester Total Hours							

120 TOTAL HOURS

(42) Advanced minimum credit hours

Revised: Tuesday, February 18th, 2025