

Bachelor of Science (BS) Chemistry

2024-2026

7-12. Teacher Certification

	Course #	Course Title M Gra	n. ide Gi	EC Prerequisite	Additional Notes
3	Choose 1	Communication		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	General Chemistry I	0	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	09	90 Credit/registration in CHEM 1311	
3	POLS 2305	U.S. Federal Government & Politics	0	70	See General Education Core for more details.
4	MATH 2413	Calculus I	0	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	3	Must be in a College of Sciences major.	
	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 schoo rank, major declaration
15	Semester Total Hours				
3	Choose 1	Communication	0:	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	General Chemistry II	0	30 CHEM 1311.	
1	CHEM 1112	General Chemistry II Lab	09	90 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	0	70	See General Education Core for more details.
3	Choose 1	Creative Arts	0	50	See General Education Core for course options.
1	UTCH 1102	Inquiry-Based Lesson Design		UTCH 1101 with a grade of 'C' or better.	
18	Semester Total Hours				
Н	Course #	Course Title M	n. Gl	EC Prerequisite	Additional Notes
		Gr			
3	CHEM 2323	Organic Chemistry I		CHEM 1312.	
3	CHEM 2323 CHEM 2123			CHEM 1312. CHEM 1112.	
_		Organic Chemistry I			See General Education Core for course options.
1	CHEM 2123	Organic Chemistry I Organic Chemistry I Lab	04	CHEM 1112.	See General Education Core for course options. See General Education Core for more details. Options: HIST 1301 or HIST 2327
1	CHEM 2123 Choose 1	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture	04	CHEM 1112.	See General Education Core for more details.
3	CHEM 2123 Choose 1 Choose 1	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I	04	CHEM 1112. ON MATH 1414 or MATH 1314, MATH 2412 or MATH 2413 UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with	See General Education Core for more details.
1 3 3 4 3	CHEM 2123 Choose 1 Choose 1 PHYS 1401	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I	04	CHEM 1112. 60 90 MATH 1414 or MATH 1314, MATH 2412 or MATH 2413	See General Education Core for more details.
1 3 3 4 3	CHEM 2123 Choose 1 Choose 1 PHYS 1401 UTCH 3301	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I	04	CHEM 1112. ON MATH 1414 or MATH 1314, MATH 2412 or MATH 2413 UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with	See General Education Core for more details.
1 3 4 3 17	CHEM 2123 Choose 1 Choose 1 PHYS 1401 UTCH 3301 Semester Total Hours	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I Knowing and Learning in Mathematics and Science	04	CHEM 1112. 60 90 MATH 1414 or MATH 1314, MATH 2412 or MATH 2413 UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with UTCH 1102.	See General Education Core for more details.
1 3 4 3 17	CHEM 2123 Choose 1 Choose 1 PHYS 1401 UTCH 3301 Semester Total Hours CHEM 2325	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I Knowing and Learning in Mathematics and Science Organic Chemistry II	04	CHEM 1112. CHEM 1112. CHEM 2323.	See General Education Core for more details.
1 3 4 3 17 3	CHEM 2123 Choose 1 Choose 1 PHYS 1401 UTCH 3301 Semester Total Hours CHEM 2325 CHEM 2125	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I Knowing and Learning in Mathematics and Science Organic Chemistry II Organic Chemistry II Lab	0.00	CHEM 1112. 60 90 MATH 1414 or MATH 1314, MATH 2412 or MATH 2413 UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with UTCH 1102. CHEM 2323. CHEM 2325.	See General Education Core for more details. Options: HIST 1301 or HIST 2327 See General Education Core for more details.
1 3 4 3 17 3 1 3	CHEM 2123 Choose 1 Choose 1 PHYS 1401 UTCH 3301 Semester Total Hours CHEM 2325 CHEM 2125 Choose 1	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I Knowing and Learning in Mathematics and Science Organic Chemistry II Organic Chemistry II Lab American History	04 01 02 04	CHEM 1112. OHEM 1112. CHEM 2323. CHEM 2325.	See General Education Core for more details. Options: HIST 1301 or HIST 2327 See General Education Core for more details. Options: HIST 1302 or HIST 2328
1 3 4 3 17 3 1 3	CHEM 2123 Choose 1 Choose 1 PHYS 1401 UTCH 3301 Semester Total Hours CHEM 2325 CHEM 2125 Choose 1 Choose 1	Organic Chemistry I Organic Chemistry I Lab Language, Philosophy & Culture American History General Physics I Knowing and Learning in Mathematics and Science Organic Chemistry II Organic Chemistry II Lab American History Integrative/Experiential Learning Option	04 01 02 04	CHEM 1112. OHEM 1112. OHEM 1112. CHEM 2323. CHEM 2325.	See General Education Core for more details. Options: HIST 1301 or HIST 2327 See General Education Core for more details. Options: HIST 1302 or HIST 2328 See General Education Core for course options.

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

Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes			
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.				
FALL	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.				
15 S	15 Semester Total Hours								
3	CHEM 3304	Physical Chemistry I			PHYS 1402; MATH 2413 with a grade of "C" or better and pre or co-requisites in MATH 2414.				
1	CHEM 3104	Physical Chemistry I Lab			CHEM 3304.				
3	READ 4305	Disciplinary Literacy in the Classroom							
3	UTCH 3302	Classroom Interactions	С		(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.				
SPR 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.				
18 S	18 Semester Total Hours								
н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes			
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.				

		Course #	Course Title	Grade	GEC Prerequisite	Additional Notes		
	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.			
FALL	2	CHEM 4201	Chemistry Problems I		Chemistry major with junior standing or consent of instructor.			
тн үед	3	PHIL 3317	Perspectives on Science and Mathematics		Credit of "C" or better or registration in UTCH 3302.			
FOUR'	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							
	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: Wednesday, October 9th, 2024