



Bachelor of Science (BS) Chemistry

	! H	Course #	Course Title	Min. GEC	Prerequisite	Additional Notes
	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 1301
	3	CHEM 1311	General Chemistry I	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	090	Credit/registration in CHEM 1311	
FALL	3	Choose 1	MATH course			Satisfies Major-Specific Requirement MATH 1314, MATH 1414, MATH 1342, MATH 1343
	3	Choose 1	Social and Behavioral Sciences (Core)	080		See General Education Core for course options.
EAR		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
₹ST \	13 :	Semester Total Hours	s			
盖	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
	3	CHEM 1312	General Chemistry II	030	CHEM 1311.	See General Education Core for course options.
SPRING	1	CHEM 1112	General Chemistry II Lab	090	Credit/registration in CHEM 1312.	
ags.	4	MATH 2412	PreCalculus		Undergraduate level MATH 1314 Minimum Grade of C or Undergraduate level MATH 1440 Minimum Grade of C or Undergraduate level MATH 1340 Minimum Grade of C or Undergraduate level MATH 1414 Minimum Grade of C	Satisfies Major-Specific Requirement.
	3	Choose 1	American History (Core)	060		See General Education Core for more details. Options: HIST 1301 or HIST/MASC 2327
	14 :	Semester Total Hours	s			
	! Н	Course #	Course Title	Min. GEC Grade	Prerequisite	Additional Notes
r	3	Course #	Course Title Organic Chemistry I	Grade	Prerequisite: CHEM 1312	Additional Notes Satisfies Major-Specific Requirement.
Γ				Grade		
I	3	CHEM 2323	Organic Chemistry I	Grade	Prerequisite: CHEM 1312	Satisfies Major-Specific Requirement.
FALL	3	CHEM 2323 CHEM 2123	Organic Chemistry I Organic Chemistry I Lab	090	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement.
R FALL	3 1 4	CHEM 2323 CHEM 2123 PHYS 1401	Organic Chemistry I Organic Chemistry I Lab General Physics I	090	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning
ID YEAR FALL	3 1 4 4	CHEM 2323 CHEM 2123 PHYS 1401 MATH 2413	Organic Chemistry I Organic Chemistry I Lab General Physics I Calculus I	090 C 020	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning Satisfies Major-Specific Requirement.
ECOND YEAR FALL	3 1 4 4 3 3	CHEM 2323 CHEM 2123 PHYS 1401 MATH 2413 Choose 1	Organic Chemistry I Organic Chemistry I Lab General Physics I Calculus I Language, Philosophy & Culture (Core) American History (Core)	090 C 020 040	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning Satisfies Major-Specific Requirement. See General Education Core for course options. See General Education Core for more details.
SECOND YEAR FALL	3 1 4 4 3 3	CHEM 2323 CHEM 2123 PHYS 1401 MATH 2413 Choose 1 Choose 1	Organic Chemistry I Organic Chemistry I Lab General Physics I Calculus I Language, Philosophy & Culture (Core) American History (Core)	090 C 020 040 060	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning Satisfies Major-Specific Requirement. See General Education Core for course options. See General Education Core for more details.
SECOND YEAR FALL	3 1 4 4 3 3 18 9	CHEM 2323 CHEM 2123 PHYS 1401 MATH 2413 Choose 1 Choose 1 Semester Total Hours	Organic Chemistry I Organic Chemistry I Lab General Physics I Calculus I Language, Philosophy & Culture (Core) American History (Core)	090 C 020 040	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning Satisfies Major-Specific Requirement. See General Education Core for course options. See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328
SECOND YEAR FALL	3 1 4 4 3 3 18:	CHEM 2323 CHEM 2123 PHYS 1401 MATH 2413 Choose 1 Choose 1 Semester Total Hours	Organic Chemistry I Organic Chemistry I Lab General Physics I Calculus I Language, Philosophy & Culture (Core) American History (Core) S Organic Chemistry II	090 C 020 040 060	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics. Prerequisite: CHEM 2323	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning Satisfies Major-Specific Requirement. See General Education Core for course options. See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328 Satisfies Major-Specific Requirement.
SECOND YEAR SPRING FALL	3 1 4 4 3 3 18:3	CHEM 2323 CHEM 2123 PHYS 1401 MATH 2413 Choose 1 Choose 1 Semester Total Hours CHEM 2325 CHEM 2125	Organic Chemistry I Organic Chemistry I Lab General Physics I Calculus I Language, Philosophy & Culture (Core) American History (Core) S Organic Chemistry II Organic Chemistry II Lab	090 C 020 040	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics. Prerequisite: CHEM 2323 Prerequisite: CHEM 2325	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning Satisfies Major-Specific Requirement. See General Education Core for course options. See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328 Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement.
SECOND YEAR SPRING FALL	3 1 4 4 3 3 18: 3 1 4 4 3	CHEM 2323 CHEM 2123 PHYS 1401 MATH 2413 Choose 1 Choose 1 Semester Total Hours CHEM 2325 CHEM 2125 PHYS 1402	Organic Chemistry I Organic Chemistry I Lab General Physics I Calculus I Language, Philosophy & Culture (Core) American History (Core) S Organic Chemistry II Organic Chemistry II Lab General Physics II Calculus II Integrative/Experiential Learning Option (Core)	090 C 020 040	Prerequisite: CHEM 1312 Prerequisite: CHEM 1112 MATH 1414, MATH 1314, MATH 2412, or MATH 2413 MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics. Prerequisite: CHEM 2323 Prerequisite: CHEM 2325 PHYS 1401.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. One hour Integrative & Experiential Learning Satisfies Major-Specific Requirement. See General Education Core for course options. See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328 Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement.

CORE: The 2020-2021 list of core courses can be found in the 2020-2021 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Core Curriculum'

Symbols Key

	• Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	CHEM 3303	Biochemistry I			CHEM 2323.	Satisfies Major-Specific Requirement.
	1	CHEM 3103	Biochemistry I Lab			Prerequisite: Credit/registration in CHEM 3303.	Satisfies Major-Specific Requirement.
	3	CHEM 2301	Analytical Chemistry			Prerequisite: CHEM 1312 and CHEM 1112	Satisfies Major-Specific Requirement.
FAL	1	CHEM 2101	Analytical Chemistry Lab			Prerequisite: CHEM 2301.	Satisfies Major-Specific Requirement.
	3	POLS 2305	Government/Political Science (Core)		070		See General Education Core for more details
EAR	4	34XX-44XX	Advanced Science Elective				ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT.
RD YE	15	Semester Total Hours	1				
Ŧ	3	CHEM 3301	Inorganic Chemistry			12 hours of chemistry, including CHEM 2323.	Satisfies Major-Specific Requirement.
	1	CHEM 3101	Inorganic Chemistry Lab			Credit/registration in CHEM 3301.	Satisfies Major-Specific Requirement.
9	3	CHEM 4304	Instrumental Analysis			CHEM 2301 and CHEM 2101.	Satisfies Major-Specific Requirement.
SPRIN	1	CHEM 4104	Instrumental Analysis Lab			CHEM 4304.	Satisfies Major-Specific Requirement.
	3	POLS 2306	Government/Political Science (Core)		070		See General Education Core for more details
	4	34XX-44XX	Advanced Science Elective				ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT.
	15	Semester Total Hours	i				
				Min			
	• н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	з	Course #	Course Title Physical Chemistry I	Min. Grade	GEC	PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH	Additional Notes Satisfies Major-Specific Requirement.
				Min. Grade	GEC		Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement.
	3	CHEM 3304	Physical Chemistry I	Min. Grade	GEC	PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH	Satisfies Major-Specific Requirement.
FALL	3	CHEM 3304 CHEM 3104	Physical Chemistry I Physical Chemistry I Lab	Min. Grade	GEC	PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM
R FALL	3 1 3	CHEM 3304 CHEM 3104 CHEM 43XX-43XX	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective	Min. Grade	GEC 050	PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options.
TH YEAR FALL	3 1 3 2	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement.
OURTH YEAR FALL	3 1 3 2 3 3	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) Advanced Science Elective	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL,
FOURTH YEAR FALL	3 1 3 2 3 3	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) Advanced Science Elective	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL,
FOURTH YEAR FALL	3 1 3 2 3 3 15	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) Advanced Science Elective	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT.
FOURTH YEAR FALL	3 1 3 2 3 3 15	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) Advanced Science Elective Physical Chemistry II	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement.
FOURTH YEAR FALL	3 1 3 2 3 3 15 3	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) Advanced Science Elective Physical Chemistry II Physical Chemistry II Lab	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304 Credit/registration in CHEM 3305.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement.
FOURTH YEAR FALL	3 1 3 2 3 3 15 3 1 3 3 3	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 CHEM 4305 CHEM 43XX-43XX 33XX-43XX	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) Advanced Science Elective Physical Chemistry II Physical Chemistry II Lab Chemistry Capstone Advanced Chemistry Elective Advanced Science Elective	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304 Credit/registration in CHEM 3305.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement.
FOURTH YEAR SPRING FALL	3 1 3 2 3 3 15 3 1 3 3 3 3	CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 CHEM 4305 CHEM 4305 CHEM 43XX-43XX	Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) Advanced Science Elective Physical Chemistry II Physical Chemistry II Lab Chemistry Capstone Advanced Chemistry Elective Advanced Science Elective Free Elective	Min. Grade		PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304 Credit/registration in CHEM 3305.	Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement.

120 TOTAL HOURS

Approved: Wednesday, February 3, 2021

(42) Advanced institutional minimum credit hours

Revised: Wednesday, October 14, 2020