West Texas A&M University **Advising Services Degree Checklist** 2019-2020

(For assistance completing this form, contact Advising Services at 806-651-5300)

NAME:

WT ID:\_\_\_\_\_

DATE:

## Chemistry Option I—Professional Chemistry Chemistry and Physics Chemistry and Physics Bldg, (301 26th St.) (806)651-2940

CORE CURRICULUM COURSES: 42 HOURS +	HRS	AC
Communication (Core 10)		
ENGL 1301 Introduction to Academic Writing and Argumentation	3	
COMM 1315, 1318, or 1321	3	
Mathematics (Core 20)		
See University Core Requirements below	(3)	
Life and Physical Sciences (Core 30)	(0)	
See University Core Requirements below Language, Philosophy and Culture (Core 40)	(6)	
ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371 Choose 1	3	
Creative Arts (Core 50)           ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310         Choose 1	3	
American History (Core 60)		
HIST 1301, 1302, 2301, 2381 Choose 2	6	
Government/Political Science (Core 70)	· · · · ·	
POSC 2305 and 2306	6	
Social and Behavioral Sciences (Core 80)	·	•
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1	3	
Component Area Option (Core 90) See University Core Requirements below	(6)	
CHEMISTRY—OPTION I (PROFESSIONAL CHEMISTRY) REQUIREMENTS: 80-84 HOURS	MAJO	R
REQUIREMENTS: 80-84 HOURS A grade of "C" or better must be earned in all courses required UNIVERSITY CORE REQUIREMENTS: 15 HOURS •		
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REQUIREMENTS: 80-84 HOURSA grade of "C" or better must be earned in all courses requiredUNIVERSITY CORE REQUIREMENTS: 15 HOURS •CORE 20MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]ACCORE 30CHEM 1411*[3] Chemistry ICORE 30CHEM 1412*[3] Chemistry IICORE 30CHEM 1412*[3] Chemistry IICORE 30CHEM 1412*[3] Chemistry IICORE 30CHEM 1412*[3] Chemistry IICORE 90ENGL 1302* or 2311*	for maje	
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         AC         CORE 30 CHEM 1411*[3] Chemistry I         CORE 30 CHEM 1412*[3] Chemistry II         CORE 30 CHEM 1412*[3] Chemistry II	for majo 3 3 3	
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         AC         CORE 30 CHEM 1411*[3] Chemistry I         CORE 30 CHEM 1412*[3] Chemistry II         CORE 30 CHEM 1412*[3] Chemistry II         CORE 90 ENGL 1302* or 2311*         CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]	for majo 3 3 3 3 3 3	pr.
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         AC         CORE 30 CHEM 1411*[3] Chemistry I         CORE 30 CHEM 1412*[3] Chemistry II         CORE 30 CHEM 1412*[3] Chemistry II         CORE 90 ENGL 1302* or 2311*         CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]         PROF. CHEMISTRY REQUIREMENTS (OPTION 1): 65-69	for majo 3 3 3 3 3 3	pr.
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         AC         CORE 30 CHEM 1411*[3] Chemistry I         AC         CORE 30 CHEM 1412*[3] Chemistry II         CORE 30 CHEM 1412*[3] Chemistry II         CORE 90 ENGL 1302* or 2311*         CORE 90 ENGL 1302* or 2311*         CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]         PROF. CHEMISTRY REQUIREMENTS (OPTION 1): 65-69 CHEM 2423*, 2423L Organic Chemistry I	for majo	pr.
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         AC         CORE 30 CHEM 1411*[3] Chemistry I         CORE 30 CHEM 1412*[3] Chemistry II         CORE 30 CHEM 1412*[3] Chemistry II         CORE 90 CHEM 1302* or 2311*         CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]         PROF. CHEMISTRY REQUIREMENTS (OPTION 1): 65-69         CHEM 2423*, 2423L Organic Chemistry II         AC         CHEM 2425*, 2425L Organic Chemistry II	for major 3 3 3 3 3 HOUR 4	pr.
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         AC         CORE 30 CHEM 1411*[3] Chemistry I         CORE 30 CHEM 1412*[3] Chemistry II         CORE 90 ENGL 1302* or 2311*         CORE 90 ENGL 1302* or 2311*         CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]         PROF. CHEMISTRY REQUIREMENTS (OPTION 1): 65-69 CHEM 2423*, 2423L Organic Chemistry I	for major 3 3 3 3 3 4 HOUR 4 4	pr.
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]       AC         CORE 30 CHEM 1411*[3] Chemistry I         CORE 30 CHEM 1412*[3] Chemistry II         AC         CORE 90 ENGL 1302* or 2311*         CORE 90 ENGL 1302* or 2311*         CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]         PROF. CHEMISTRY REQUIREMENTS (OPTION 1): 65-69         CHEM 2423*, 2423L Organic Chemistry I         AC         CHEM 3511*, 3511L Analytical Chemistry	for major 3 3 3 3 HOUR 4 4 5	pr.
REQUIREMENTS: 80-84 HOURS A grade of "C" or better must be earned in all courses requiredUNIVERSITY CORE REQUIREMENTS: 15 HOURS •CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]ACCORE 30 CHEM 1411*[3] Chemistry IACCORE 30 CHEM 1411*[3] Chemistry IICORE 30 CHEM 1412*[3] Chemistry IIACCORE 90 ENGL 1302* or 2311*CORE 90 ENGL 1302* or 2311*CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]PROF. CHEMISTRY REQUIREMENTS (OPTION 1): 65-69 CHEM 2423*, 2423L Organic Chemistry IACCHEM 2423*, 2425L Organic Chemistry IIACCHEM 3421*, 3421L Physical Chemistry IICHEM 4411*, 4411L Instrumental Analysis	for majo 3 3 3 3 3 4 4 4 5 4	pr.
REQUIREMENTS: 80-84 HOURS         A grade of "C" or better must be earned in all courses required         UNIVERSITY CORE REQUIREMENTS: 15 HOURS •         CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]         AC         CORE 30 CHEM 1411*[3] Chemistry I         CORE 30 CHEM 14112*[3] Chemistry II         AC         CORE 90 CHEM 14112*[3] Chemistry II         CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]         PROF. CHEMISTRY REQUIREMENTS (OPTION 1): 65-69         CHEM 2423*, 2423L Organic Chemistry I         AC         CHEM 2425*, 2425L Organic Chemistry II         AC         CHEM 3511*, 3511L Analytical Chemistry         CHEM 3421*, 3421L Physical Chemistry II	for majo 3 3 3 3 3 4 4 4 4 5 4 4 4 4	pr.

## **Bachelor of Science Degree** BS.CHEM.PROF (104)

CHEM 4397* Undergraduate Research		3		
CHEM 3201* Chemical Literature		2		
CHEM 4103* Seminar in Chemistry		1		
ADVANCED CHEMISTRY ELECTIVE		3		
MATH 1316* Plane Trigonometry <b>OR</b> MATH 2412* Pre-Calculus (if not taken to satisfy Core 20)	AC	0-4		
MATH 2413* Calculus I	AC	4		
MATH 2414* Calculus II	AC	4		
MATH 3340* Calculus III	AC	3		
PHYS 2425*, 2425L Calculus Physics I	٩C	4		
PHYS 2426*, 2426L Calculus Physics II	AC	4		
CHEM 4370* (MPS 4370) Senior Investigations OR MPS 4393* Math/Physical Science/Engineering Technology Honors		3		
BACHELOR OF SCIENCE REQUIREMENTS Covered by requirements for major.		OPTION		
ELECTIVES: 9-13 HOURS BY ADVISEMENT +				
ELECTIVES				
		9-13		
MINIMUM HOURS REQUIRED TO COMPLETE DEGREE		120		

• NOTE: The core curriculum must total exactly 42 hours; excess hours must be moved to the major as an elective or a major requirement and stay within the 120hour requirement or approved total submitted to the Coordinating Board for degree requirements. Some majors specify particular courses to meet core curriculum requirements when options are available.

\* Indicates prerequisites—see catalog for more information.

\*\* Or an equivalent course (second year, second semester) in a foreign language.

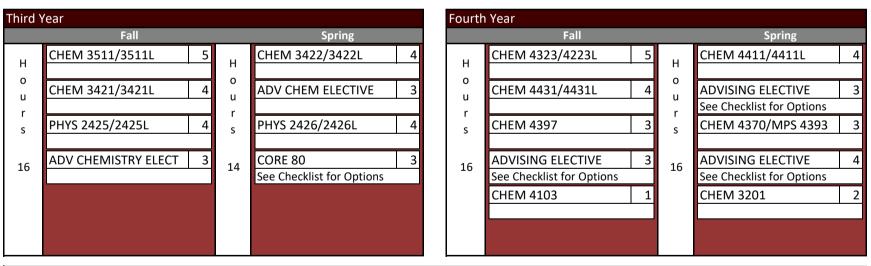
NOTE I: This option follows course recommendations of the American Chemical Society and prepares students for positions in industry, government and education. It is recommended for students planning to do graduate study in chemistry or seeking employment as chemists in industry.

NOTE II: At least 39 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU, and 30 of the final 36 hours counted toward the degree must be earned at WTAMU. A maximum of six semester hours in religion and six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

Note: This is NOT a degree plan. After completing 30 hours, students are required to request an official degree plan by using the online Degree Plan Request form. Students who have questions about their degree plan should contact the office of the dean of the Paul Engler College of Agriculture and Natural Sciences, which is located in the Happy State Bank Academic & Research Building, Suite 262 (phone 806-651-3570). Students who have completed 30 hours will not be allowed to progress without requesting a degree plan.

AC This symbol indicates courses that apply towards degree programs at WT. All core classes are offered at AC. Please refer to the list regarding major specific courses. Course prefixes and numbers may vary at each institution. Please contact an adviser to ensure the course will apply towards chosen core area.

**Chemistry - Option I-Professional Chemistry** Chemistry and Physics Advising Services Bachelor of Science Degree BS.CHEM.PROF 2019 - 2020 Curriculum Guide 651-2940 Degree Plan Total Hours: 120 Major Code: 104 301 26th **First Year** Second Year Fall Spring Fall Spring CHEM 2425/2425L CORE 10-ENGL 1301 CORE 10-ENGL 3 MATH 2414 4 3 4 н Н н н 1302 or 2311 0 0 0 0 MATH 1316 OR 2412\* 3 MATH 2413 CHEM 2423/2423L 4 MATH 3340 3 Δ u u u u r r r r CHEM 1411/1411L CORE 10-COMM 3 CORE 50 3 CORE 70-POSC 3 Δ S s s s 1315, 1318, or 1321 2305 or 2306 See Checklist for Options CHEM 1412/1412L CORE 70-POSC 3 CORE 40 3 CORE 60-HIST 3 4 13 17 14 14 1301, 1302, 2301 or 2381 2305 or 2306 See Checklist for Options CORE 90-IDS 1071 CORE 60-HIST 1 3 1301, 1302, 2301 or 2381



DISCLAIMER: This curriculum guide should be used in conjunction with the corresponding degree checklist for general planning purposes only. The degree checklist (later a student's official degree plan) should be referred to as the comprehensive list of all courses required for the degree. An official degree plan is required after completing 30 hours. Students should always seek the advice of their academic adviser before scheduling classes.

Notes: This option follows course recommendation of the American Chemical Society and prepares students for positions in industry, government and

education. It is recommended for students planning to do graduate study in chemistry or seeking employment as chemists in industry.

\* MATH 2412 is recommended over MATH 1316 for this degree plan.

\*\* MATH 2412(1) or MATH 2413(1) can substitute for IDS 1071(1) if these are used to satisfy CORE 20 requirements.