### West Texas A&M University Advising Services Degree Checklist 2014-2015

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

IAME:	WT ID:	DATE:

## Chemistry Option I—Professional Chemistry Department of Mathematics, Chemistry and Physics Classroom Center, Room 420 (806)651-2540

Classroom Center, Room 420 (806)651-2540		
CORE CURRICULUM COURSES: 42 HOURS +	HRS	
Communication (Code 10)		
ENGL 1301 (ENG 101) Introduction to Academic Writing and Argumentation	3	
COMM 1315 (SCOM 101, 1315), 1318 (SCOM 103, 1318), or 1321 (SCOM 201, 1321)	3	
Mathematics (Code 20)		
See University Core Requirements below	(3)	
Life and Physical Sciences (Code 30) See University Core Requirements below	(6)	
Language, Philosophy and Culture (Code 40)	(6)	
ANTH 2351 (201), ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311 (110), 2323, 2372 (210); PHIL 1301 (101), 2374 (204); SPAN 2311* (206), 2312*/** (207), 2313* or SPAN 2315*/** Choose 1	3	
Creative Arts (Code 50)		
HUMA 1315 (FA 101); ARTS 1303 (ART 151), ARTS 1304 (ART 152); DANC 2303; MUSI 1306 (MUS 101) or 1208 and 1209* (extra MUSI hour moves to Code 90); or THRE 1310 (105) Choose 1	3	
American History (Code 60)		
HIST 1301 (201), 1302 (202), 2301, 2381 Choose 2	6	
Government/Political Science (Code 70)		ı
POSC 2305 (101) and 2306 (102)	6	
Social and Behavioral Sciences (80)		
AGBE 2317* (213); COMM 2377 (SCOM 255, 2377); CRIJ 1301 (CJ 105); ECON 2301 (ECO 201), 2302 (ECO 202); PSYC 2301 (PSY 201); SOCI 1301 (201) Choose 1	3	
Component Area Option (Code 90)		
See University Core Requirements below	(6)	
CHEMISTRY—OPTION I (PROFESSIONAL CHEMISTRY) N		
REQUIREMENTS: 80-84 HOURS A grade of "C" or better must be earned in all courses required for		
A grade of "C" or better must be earned in all courses required for		
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20  MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or	or majo	
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20 MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30 CHEM 1411*[3] (101) Chemistry I  CORE 30 CHEM 1412*[3] (102) Chemistry II	or majo	
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20 MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30 CHEM 1411*[3] (101) Chemistry I  CORE 30 CHEM 1412*[3] (102) Chemistry II  CORE 90 ENGL 1302* (ENG 102) or 2311* (270)	3	
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20 MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30 CHEM 1411*[3] (101) Chemistry I  CORE 30 CHEM 1412*[3] (102) Chemistry II  CORE 90 ENGL 1302* (ENG 102) or 2311* (270)  CORE 90 CHEM 1411L[1], 1412L[1]  AND	3 3	
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20 MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30 CHEM 1411*[3] (101) Chemistry I  CORE 30 CHEM 1412*[3] (102) Chemistry II  CORE 90 ENGL 1302* (ENG 102) or 2311* (270)  CORE 90 CHEM 1411L[1], 1412L[1]	3 3 3 3	or.
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20 MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30 CHEM 1411*[3] (101) Chemistry I  CORE 30 CHEM 1412*[3] (102) Chemistry II  CORE 90 ENGL 1302* (ENG 102) or 2311* (270)  CORE 90 CHEM 1411L[1], 1412L[1]  AND IDS 1071[1], MATH 2412[1], or 2413[1]	3 3 3 3	or.
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20 MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30 CHEM 1411*[3] (101) Chemistry I  CORE 30 CHEM 1412*[3] (102) Chemistry II  CORE 90 ENGL 1302* (ENG 102) or 2311* (270)  CORE 90 CHEM 1411L[1], 1412L[1]  AND IDS 1071[1], MATH 2412[1], or 2413[1]  PROF. CHEMISTRY REQUIREMENTS (OPTION I): 65-69 H	3 3 3 3 OURS	or.
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20  MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30  CHEM 1411*[3] (101) Chemistry I  CORE 30  CHEM 1412*[3] (102) Chemistry II  CORE 90  ENGL 1302* (ENG 102) or 2311* (270)  CORE 90  CHEM 1411L[1], 1412L[1]  AND  IDS 1071[1], MATH 2412[1], or 2413[1]  PROF. CHEMISTRY REQUIREMENTS (OPTION I): 65-69 H  CHEM 2523*, 2523L (201) Organic Chemistry II  CHEM 2525*, 2525L (202) Organic Chemistry II  CHEM 3511*, 3511L (311) Analytical Chemistry	3 3 3 3 3 OURS 5	or.
A grade of "C" or better must be earned in all courses required for UNIVERSITY CORE REQUIREMENTS: 15 HOURS •  CORE 20 MATH 1314* (110), 1316* (111), 1324* (115), 2412*[3] (1348), or 2413*[3] (240)  CORE 30 CHEM 1411*[3] (101) Chemistry I  CORE 30 CHEM 1412*[3] (102) Chemistry II  CORE 90 ENGL 1302* (ENG 102) or 2311* (270)  CORE 90 CHEM 1411L[1], 1412L[1]  AND IDS 1071[1], MATH 2412[1], or 2413[1]  PROF. CHEMISTRY REQUIREMENTS (OPTION I): 65-69 H  CHEM 2523*, 2523L (201) Organic Chemistry II	3 3 3 3 3 OURS 5 5 5	or.

### Bachelor of Arts Degree BA.CHEM.PROF (104)

CHEM 4411*, 4411L (411) Instrumental Analysis	4				
CHEM 4323* (421) Biochemistry I CHEM 4223L* (421L) Biochemistry I Laboratory	5				
CHEM 4431*, 4431L (431) Inorganic Chemistry	4				
CHEM 4397* (498) Undergraduate Research	3				
MATH 2413* (240) Calculus I	4				
MATH 1316* (111) Plane Trigonometry <b>OR</b> MATH 2412* (1348) Pre-Calculus (if not taken to satisfy Core 20)	0-4				
MATH 2414* (241) Calculus II	4				
MATH 3340* (340) Calculus III	3				
PHYS 2425*, 2425L (210) Calculus Physics I	4				
PHYS 2426*, 2426L (211) Calculus Physics II	4				
PHYS 3095 (341) Laboratory Problems	2				
CHEM 4370* (MPS 4370) Senior Investigations <b>OR</b> MPS 4393* (499) Math/Physical Science/Engineering Technology Honors					
BACHELOR OF ARTS REQUIREMENTS: 12 HOURS	OP	TIO	N		
Six hours of foreign language.	(6-8)				
Six hours chosen from art, English, history, modern languages, music, philosophy and theatre.	6				
ELECTIVES: 0-1 HOUR ◆					
ELECTIVE	0-1				
MINIMUM HOURS REQUIRED TO COMPLETE DEGREE	120				
A NOTE: The care austiculum must total exectly 42 hours, aveces had	-				

<sup>◆</sup> 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 120-hour 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.

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 (RELI) 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 encouraged to request an official degree plan in the office of the dean of the College of Agriculture, Science and Engineering, located in the Agriculture and Natural Sciences Building, Room 106 (or call 651-2585). Students who have completed 45 hours will not be allowed to progress without requesting a degree plan.

<sup>\*</sup> Indicates prerequisites—see catalog for more information.

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

# Advising Services 2014 - 2015 Curriculum Guide

### **Chemistry Option I-Professional Chemistry**

Advising Services Bachelor of Arts Degree
BA.CHEM.PROF

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cc 420 651-2540 Degree Plan Total Hours: 121 Major Code: 104

First Y	First Year						
	Fall			Spring			
١	CORE 10-ENGL 1301	3		CORE 90-ENGL	3		
H o			Н	1302 or 2311			
u	MATH 1316 OR 2412*	3	o u	MATH 2413	4		
l r			r				
S	CHEM 1411/1411L	4	s	CHEM 1412/1412L	4		
14	CORE 60-HIST	3	17	CORE 10-COMM	3		
14	1301, 1302, 2301 or 2381		17	1315, 1318, or 1321			
	CORE 90-IDS 1071**	1		CORE 60-HIST	3		
				1301, 1302, 2301 or 2381			

Secon	Second Year						
	Fall			Spring			
l	MATH 2414	4		CHEM 2525/2525L	5		
H			Н				
o u	CHEM 2523/2523L	5	o u	MATH 3340	3		
l r			r				
s	CORE 50	3	S	CORE 70-POSC	3		
	See Checklist for Options			2305 or 2306			
15	CORE 70-POSC	3	14	CORE 40	3		
	2305 or 2306		1-7	See Checklist for Options			

Third Year						
	Fall			Spring		
Н	CHEM 3511/3511L	5	Н	CHEM 3522/3522L	5	
o u	CHEM 3521/3521L	5	o u	PHYS 3095	2	
r s	PHYS 2425/2425L	4	r s	PHYS 2426/2426L	4	
17	BA REQUIREMENT See Checklist for Options	3	14	BA REQUIREMENT See Checklist for Options	3	

Fourth	Fourth Year						
Fall			Spring				
	CHEM 4323/4223L	5		CORE 80	3		
Н			Н	See Checklist for Options			
o u	CHEM 4431/4431L	4	o u	CHEM 4411/4411L	4		
r			r				
S	CHEM 4397	3	s	BA REQUIREMENT	4		
				Foreign Language			
16	BA REQUIREMENT	4	14	CHEM 4370/MPS4393	3		
10	Foreign Language		14				

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 45 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 educaiton. It is recommended for students planr 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.