

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

CC This symbol indicates courses that apply towards degree programs at WT. All core classes are offered at CC. 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.

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 | CC |
|--|-----------------|------------|-----------|
| 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) | | | |
| See University Core Requirements below | | (6) | |
| Language, Philosophy and Culture (Core 40) | | | |
| 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) MAJOR REQUIREMENTS: 80-84 HOURS | | | |
| A grade of "C" or better must be earned in all courses required for major. | | | |
| UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦ | | | |
| CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3] | | 3 | CC |
| CORE 30 CHEM 1411*[3] Chemistry I | | 3 | CC |
| CORE 30 CHEM 1412*[3] Chemistry II | | 3 | CC |
| CORE 90 ENGL 1302* or 2311* | | 3 | CC |
| CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1] | | 3 | |
| PROF. CHEMISTRY REQUIREMENTS (OPTION I): 65-69 HOURS | | | |
| CHEM 2423*, 2423L Organic Chemistry I | | 4 | CC |
| CHEM 2425*, 2425L Organic Chemistry II | | 4 | CC |
| CHEM 3511*, 3511L Analytical Chemistry | | 5 | |
| CHEM 3421*, 3421L Physical Chemistry I | | 4 | |
| CHEM 3422*, 3422L Physical Chemistry II | | 4 | |
| CHEM 4411*, 4411L Instrumental Analysis | | 4 | |
| CHEM 4323* Biochemistry I CHEM 4223L* Biochemistry I Laboratory | | 5 | |

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

| | | |
|---|------------|-----------|
| CHEM 4431*, 4431L Inorganic Chemistry | 4 | |
| CHEM 4397* Undergraduate Research | 3 | |
| CHEM 3201* Chemical Literature | 2 | |
| CHEM 4103* Seminar in Chemistry | 1 | |
| ADVANCED CHEMISTRY ELECTIVE | 3 | |
| MATH 2413* Calculus I | 4 | CC |
| MATH 1316* Plane Trigonometry OR CC MATH 2412* Pre-Calculus (if not taken to satisfy Core 20) | 0-4 | |
| MATH 2414* Calculus II | 4 | CC |
| MATH 3340* Calculus III | 3 | CC |
| PHYS 2425*, 2425L Calculus Physics I | 4 | CC |
| PHYS 2426*, 2426L Calculus Physics II | 4 | CC |
| CHEM 4370* (MPS 4370) Senior Investigations OR MPS 4393* Math/Physical Science/Engineering Technology Honors | 3 | |
| BACHELOR OF ARTS REQUIREMENTS: 12 HOURS CC OPTION | | |
| 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 | |

♦ 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.

* 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 (REL) 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.



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

| Second Year | | | | |
|---------------------------------|--------------------------------------|--------|--------------------------------------|---|
| Fall | | Spring | | |
| H o u r s 14 | MATH 2414 | 4 | H o u r s 13 | |
| | CHEM 2423/2423L | 4 | | |
| | CORE 50 See Checklist for Options | 3 | | |
| | CORE 70-POSC 2305 or 2306 | 3 | | |
| | | | | |
| | | | | |
| | | | CHEM 2425/2425L | 4 |
| | | | MATH 3340 | 3 |
| | | | CORE 70-POSC 2305 or 2306 | 3 |
| | | | CORE 40 See Checklist for Options | 3 |

| Third Year | | | | |
|---------------------------------|---|--------|---|---|
| Fall | | Spring | | |
| H o u r s 16 | CHEM 3511/3511L | 5 | H o u r s 14 | |
| | CHEM 3421/3421L | 4 | | |
| | PHYS 2425/2425L | 4 | | |
| | BA REQUIREMENT See Checklist for Options | 3 | | |
| | | | | |
| | | | | |
| | | | CHEM 3422/3422L | 4 |
| | | | ADV CHEM ELECTIVE | 3 |
| | | | PHYS 2426/2426L | 4 |
| | | | BA REQUIREMENT See Checklist for Options | 3 |

| Fourth Year | | | | |
|---------------------------------|------------------------------------|--------|--------------------------------------|---|
| Fall | | Spring | | |
| H o u r s 17 | CHEM 4323/4223L | 5 | H o u r s 16 | |
| | CHEM 4431/4431L | 4 | | |
| | CHEM 4397 | 3 | | |
| | BA REQUIREMENT Foreign Language | 4 | | |
| | CHEM 4103 | 1 | | |
| | | | | |
| | | | CORE 80 See Checklist for Options | 3 |
| | | | CHEM 4411/4411L | 4 |
| | | | BA REQUIREMENT Foreign Language | 4 |
| | | | CHEM 4370/MPS4393 | 3 |
| | | | CHEM 3201 | 2 |

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.