West Texas A&M University
Advising Services
Degree Checklist
2026-2027

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

NAME:_____ **WT ID:**_____ **DATE:**_____

Physical Science (Grades 6-12) Certification
Department of Chemistry and Physics
NSB 106 (806) 651-2940

CORE CURRICULUM COURSES: 42 HOURS ♦	HRS		
Communication (Core 10)			
ENGL 1301 Intro. to Academic Writing & Argumentation **OR** ENGL 1311 Writing About Ideas	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 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 **Choose 1**	3		
American History (Core 60)			
HIST 1301, 1302, 2301, 2381, or 2382 **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; GEOG 1302; PSYC 2301; SOCI 1301 **Choose 1**	3		
Component Area Option (Core 90)			
See **University Core Requirements** below	(6)		
PHYSICAL SCIENCE (GRADES 6-12) CERTIFICATION REQUIREMENTS: 71-77 HOURS **A grade of "C" or better and a 2.75 GPA is required.^**			
UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦			
CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]	3		
CORE 30 CHEM 1411*[3] Chemistry I	3		
CORE 30 CHEM 1412*[3] Chemistry II	3		
CORE 90 ENGL 1302* Research and Rhetoric **OR** ENGL 2311* Introduction to Professional and Technical Communication	3		
CORE 90 CHEM 1411L[1], 1412L[1] **AND** IDS 1071[1], MATH 2412[1], or 2413[1]	3		
PHYSICAL SCIENCE REQUIREMENTS:56-62 HOURS **(A grade of "C" or better and a 2.75 GPA is required.^)**			
CHEM 2423*, 2423L Organic Chemistry I	4		
CHEM 2425*, 2425L Organic Chemistry II	4		
CHEM 3511*, 3511L Analytical Chemistry	5		
Take three courses from: CHEM 3421*, 3421L Physical Chemistry I; CHEM 3422*, 3422L Physical Chemistry II; CHEM 4323* **and** 4223L Biochemistry I/ Biochemistry I Laboratory; CHEM 4324* **and** 4224L Biochemistry II/ Biochemistry II Laboratory; CHEM 4411*, 4411L Instrumental Analysis; CHEM 4431* Inorganic Chemistry	12-14		
GEOG/GESC 3313 Meteorology	3		

Bachelor of Science Degree
Major: Chemistry
BS.6-12.PHYS.SCI.EDS (499) – TExES Exams: 160, 237

MATH 1316* Plane Trigonometry **OR** MATH 2412* Pre-Calculus **(if not taken to satisfy Core 20)**	0-4	
MATH 2413* Calculus I	4	
MATH 2414* Calculus II	4	
PHYS 1311, 1311L Planetary Astronomy	3	
PHYS 2425*, 2425L Calculus Physics I	4	
PHYS 2426*, 2426L Calculus Physics II	4	
PHYS 3310* Modern Physics	3	
PHYS 3330* Mechanics I	3	
PHYS 4321* Principles of Physical Science	3	
EDUCATION REQUIREMENTS: 27 HOURS **(A grade of "C" or better and a 2.75 GPA is required.^)**		
EPSY 3341* Educational Psychology	3	
EPSY 3350 Children with Special Needs	3	
EPSY 4341* Educator Readiness and Performance	3	
EDPD 4330* Educat. Methodology & Diverse Learners	3	
EDPD 4340* Classroom Management	3	
EDPD 4348 Data-Informed Instruction and Assessment	3	
EDRD 4386 Secondary Reading in Content Area	3	
EDPD 4398* Clinical Teaching – All Certificate Areas	3	
EDSE 4341* Clinical Teaching—Secondary	3	
TOTAL HOURS REQUIRED TO COMPLETE DEGREE	**125-131**	

* Indicates prerequisites—see catalog for more information.
** Or an equivalent course (second year, second semester) in a foreign language.

^Transfer & WT GPA combined must be 2.75.

NOTE: This is NOT a degree plan. All undergraduate students must request an official degree plan from their academic dean's office by the time they have completed 30 credit hours.

WTAMU ADVISING SERVICES – 2026-2027 Curriculum Guide

Major: Physical Science (6-12) Cert. – Chemistry, B.S. BS.6-12.PHYS.SCI.EDS (499)

Year 1: Fall	
CORE 30 (Life & Phys. Sci.) – CHEM 1411/1411L Chemistry I **(4th hour goes toward Core 90)**	4
CORE 10 (Communication) – ENGL 1301 or 1311	3
CORE 20 (Mathematics) – MATH 1314 College Algebra	3
CORE 60 (American History) – See checklist for options[1]	3
CORE 90 (Comp. Area Opt.) – IDS 1071	1
PHYS 1311/1311L Planetary Astronomy	3
Total:	17

Year 1: Spring	
CORE 30 (Life & Phys. Sci.) – CHEM 1412/1412L Chemistry II **(4th hour goes toward Core 90)**	4
CORE 10 (Communication) – COMM 1315, 1318 or 1321	3
CORE 40 (Lang., Phil. & Culture) – See checklist for options[1]	3
CORE 90 (Comp. Area Opt.) – ENGL 1302 or 2311	3
MATH 2412 Pre-Calculus Math	4
Total:	17

Summer	
CORE 60 (American History) – See checklist for options[1]	3
Total:	3

Year 2: Fall	
CORE 50 (Creative Arts) – See checklist for options[1]	3
CORE 70 (Govt./Political Sci.) – POSC 2305	3
MATH 2413 Calculus I	4
CHEM 2423/2423L Organic Chemistry I **(Fall/Spring)**	4
PHYS 2425/2425L Calculus Physics I **(Fall/Spring)**	4
Apply to EPP (Educator Preparation Program)	
Total:	18

Year 2: Spring	
CORE 70 (Govt./Political Sci.) – POSC 2306	3
MATH 2414 Calculus II	4
CHEM 2425/2425L Organic Chemistry II	4
PHYS 2426/2426L Calculus Physics II	4
EPSY 3341 Educational Psychology	3
Total:	18

Year 3: Fall	
CORE 80 (Soc. & Behav. Sci.) – See checklist for options[1]	3
CHEM 3511/3511L Analytical Chemistry **(Fall only)**	5
Chemistry Elective (1) – See list below[3] for options	4-5
GEOG/GESC 3313 Meteorology **(Fall only)**	3
EDPD 4330 Educational Methodology & Diverse Learners	3
Total:	18

Year 3: Spring	
Chemistry Elective (2) – See list below[3] for options	4-5
PHYS 4321 Principles of Physical Science **(Spring only)**	3
EDPD 4348 Data-Informed Instruction and Assessment	3
EDRD 4386 Secondary Reading in the Content Area	3
EPSY 4341 Educator Readiness and Performance	3
Total:	16-17

Year 4: Fall	
Chemistry Elective (3) – See list below[3] for options	4-5
PHYS 3310 Modern Physics I **(Fall/Spring)**	3
PHYS 3330 Mechanics I **(Fall only)**	3
EDPD 4340 Classroom Management	3
EPSY 3350 Children with Special Needs	3
Electives – As needed to meet the 120 hours requirement	TBD
Total:	16+

Year 4: Spring	
EDPD 4398 Clinical Teaching – All Certificate Areas	3
EDSE 4341 Clinical Teaching – Secondary	3
Total:	6

[1] **CORE:** Physical Science (6-12) Certification (Chemistry) majors are required to take specific courses for Core 20, Core 30 and Core 90. For all other categories, they may select from any available options (see degree checklist). Apart from the major-specific core requirements, there is no set order in which core courses must be taken.

[2] **CORE 90:** One of the six hours required for Core 90 may be satisfied by IDS 1071 (if taken) or the fourth hour from MATH 2412 or 2413.

[3] **CHEMISTRY ELECTIVES:** Choose three courses from CHEM 3421, 3422, 4323/4223L, 4324/4224L, 4411, 4431.

Identified Marketable Skills	Top Three Local Employers or Industries/Professional Programs/Possible Career Opportunities
Procedure development – Chemical analysis – Data analysis	Bell Helicopter – Pantex – Servitech

Additional notes:

- 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.
- At least 36 hours of advanced work (3000- or 4000-level courses) for which tuition is paid 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.