

**West Texas A&M University
Advising Services
Degree Checklist
2021-2022**

NAME: _____ WT ID: _____ DATE: _____

Physics

Chemistry and Physics

Chemistry and Physics Bldg. (301 26th St.) (806)651-2940

CORE CURRICULUM COURSES: 42 HOURS ♦		HRS
Communication (Code 10)		
ENGL 1301 Introduction to Academic Writing and Argumentation	3	
COMM 1315, 1318, or 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)		
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 (Code 50)		
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 Choose 1	3	
American History (Code 60)		
HIST 1301, 1302, 2301, 2381, 2382 Choose 2	6	
Government/Political Science (Code 70)		
POSC 2305 and 2306	6	
Social and Behavioral Sciences (Code 80)		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1	3	
Component Area Option (Code 90)		
See University Core Requirements below	(6)	
PHYSICS MAJOR REQUIREMENTS: 64-68 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	
CORE 30		
PHYS 2425*[3] Calculus Physics I	3	
CORE 30		
PHYS 2426*[3] Calculus Physics II	3	
CORE 90		
ENGL 1302* Research and Rhetoric OR ENGL 2311* Introduction to Professional and Technical Communication	3	
CORE 90		
PHYS 2425L[1], 2426L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1]	3	
PHYSICS REQUIREMENTS: 49-53 HOURS		
PHYS 3310* Modern Physics I	3	
PHYS 3320* Thermodynamics	3	
PHYS 3330* Mechanics I	3	
PHYS 3340* Electricity and Magnetism I	3	
PHYS 3350* Advanced Physics Laboratory	3	
PHYS 4320* Quantum Mechanics I	3	
PHYS 4360* Nuclear Physics	3	
PHYS 4340* Mathematical Methods	3	

Bachelor of Science Degree

BS.PHYSICS.TPC (138)

PHYS 4197* Research in Physics	1	
PHYS 4103* Seminar in Physics	1	
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	
MATH 3340* Calculus III	3	
MATH 3342* Differential Equations I	3	
CS 1315* Programming Fundamentals OR CS 1337 Introduction to Object-Oriented Programming	3	
Take six hours from: PHYS 3323* Medical Imaging Physics PHYS 3380* Astrophysics PHYS 4310* Modern Physics II PHYS 4350* Computational Physics PHYS 4330* Optics PHYS 4390* Solid State Physics	6	
BACHELOR OF SCIENCE REQUIREMENTS		OPTION
Covered by requirements for major.		
ELECTIVES		
At least one hour must be advanced.		
18 HOURS BY ADVISEMENT	18	
GENERAL ELECTIVES ELECTIVES should be in a support field. MATH 3311 and 3321, CHEM 1411, 1412 are recommended.	7-12	
MINIMUM HRS 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: 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 (REL) and six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

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

2021-2022 Curriculum Guide

Major: Physics, B.S.

Major Code: 138

First Year																	
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Degree Total Hours 120

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.

Identified Marketable Skills:

Top 3 Local Employers or Industries/Professional Programs/Possible Career Opportunities

Prerequisites/Important Sequences/Other degree Notes:

Note 1 - CORE: Physics 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).

Note 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.

Note 3 - Physics Electives: Take six hours from PHYS 3323, 3380, 4310, 4350, 4330, 4390.