WTAMU ADVISING SERVICES – 2025-2026 Curriculum Guide

Major: Physics, B.S. **Major Code: 138**

Year 1: Fall	
CORE 10 (Communication) – ENGL 1301 or 1311	3
CORE 20 (Mathematics) – MATH 1314	3
CORE 70 – POSC 2306	3
CORE 60 – See checklist for options[1]	3
CORE 90 (Component Area Option) – IDS 1071	1
Total:	13

Year 1: Spring	
CORE 90 (Component Area Option) – ENGL 1302 or 2311	3
MATH 1316 Plane Trigonometry **or** 2412 Pre-Calculus Math (2412 is recommended)	3-4
CORE 10 – (COMM) See checklist for options[1]	3
CORE 70 – POSC 2305	3
CORE 60 – See checklist for options[1]	3
Total:	15-16

Year 2: Fall	
CORE 30 (Life & Phys. Sci.) – PHYS 2425 Calculus Physics I	3
CORE 90 (Component Area Option) – PHYS 2425L	1
MATH 2413 Calculus I	4
Elective (by advisement)	4
CORE 40 – See checklist for options[1]	3
CORE 50 – See checklist for options[1]	3
Total:	18

Year 2: Spring	
CORE 30 (Life & Phys. Sci.) – PHYS 2426 Calculus Physics II	3
CORE 90 (Component Area Option) – PHYS 2426L	1
MATH 2414 Calculus II	4
CS 1315 Programming Fundamentals **or** CS 1337 Intro. to Object-Oriented Programming	3
CORE 80 – See checklist for options[1]	3
Elective (by advisement)	4
Total:	18

Year 3: Fall	
MATH 3340 Calculus III	3
PHYS 3330 Mechanics I	3
PHYS 3320 Thermodynamics	3
Elective (by advisement)	3
Elective (by advisement)	3
Total:	15

Year 3: Spring	
MATH 3342 Differential Equations I	3
PHYS 3310 Modern Physics I	3
PHYS 3350 Advanced Physics Laboratory	3
Elective (by advisement)	3
Elective (by advisement)	3
Total:	15

Year 4: Fall	
PHYS 3340 Electricity and Magnetism I	3
PHYS 4320 Quantum Mechanics I	3
PHYS 4197 Research in Physics	1
Physics Elective(1) – See [3] below	3
Elective (by advisement)	3
Total:	13

Year 4: Spring	
PHYS 4340 Mathematical Methods	3
PHYS 4360 Nuclear Physics	3
PHYS 4103 Seminar in Physics	1
Physics Elective(2) – See [3] below	3
Elective (by advisement)	3
Total:	13

[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). 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] **Physics Elective:** Take six hours from PHYS 3323, 3380, 4310, 4350, 4330, 4390.

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