

West Texas A&M University
Advising Services
Degree Checklist
2023-2024

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

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

Environmental Engineering (see note below)
College of Engineering
ECS Building, Room 119 651-5257

CORE CURRICULUM COURSES: 42 HOURS	HRS		
Communication (10)			
ENGL 1301 Intro. to Academic Writing & Argumentation OR ENGL 1311 Writing About Ideas	3		
COMM 1315, 1318, or 1321	3		
Mathematics (20)			
See University Core Requirements below	(3)		
Life and Physical Sciences (30)			
See University Core Requirements below	(6)		
Language, Philosophy and Culture (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 (50)			
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 Choose 1	3		
American History (60)			
HIST 1301, 1302, 2381, 2382, 2301 Choose 2	6		
Government/Political Science (70)			
POSC 2305 and 2306	6		
Social and Behavioral Sciences (80)			
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; GEOG 1302; PSYC 2301; SOCI 1301 Choose 1	3		
Component Area Option (90)			
See University Core Requirements below	(6)		
ENVIRONMENTAL ENGINEERING MAJOR REQUIREMENTS: 106 HOURS			
<ul style="list-style-type: none"> • A grade of "C" or better must be earned in all courses required for major. • A grade of "C" or better is mandatory for all prerequisites listed for ECSM courses required for EVEG majors. 			
UNIVERSITY CORE REQUIREMENTS: 15 HOURS			
CORE 20			
MATH 2413*[3] Calculus I PENV	3		
CORE 30			
CHEM 1411*[3] Chemistry I AND CHEM 1412*[3] Chemistry II PENV	6		
CORE 90			
ENGL 1302* Academic Writing and Research OR ENGL 1312* Writing About Ideas II ENGL 2311* Introduction to Professional and Technical Communication	3		
CORE 90			
CHEM 1411L[1], 1412L[1], and MATH 2413[1] PENV	3		
ENGINEERING CORE REQUIREMENTS: 21 HOURS			
ENGR 1171 Engineering Ethics	1		
ENGR 1301*, 1301L Fundamentals of Engineering PENV	3		
ENGR 1304 (125), 1304L (125L) Engineering Graphics PENV	3		
ENGR 1375*, 1375L Principles of DC and AC Circuits	3		
ENGR 2301* Engineering Statics PENV	3		
ENGR 2302* Engineering Dynamics PENV	3		
ENGR 3202* Fundamentals of Engineering Economics	2		

Bachelor of Science Degree
BS.EVEG (135)
BS.PRE.ENG.ENVR (128)

CS 1315* Programming Fundamentals OR CS 1337, 1337L Programming Principles I	3		
ENVIRONMENTAL ENGINEERING REQUIREMENTS: 25 HOURS			
EVEG/CENG 2331* Intro. to Environmental Engineering	3		
EVEG 3304* Introduction to Fluid Mechanics for Civil and Environmental Engineers	3		
EVEG 3411* Water Resources Engineering	4		
EVEG 3342* Principles of Water and Wastewater Treatment Design	3		
EVEG 3345* Principles of Air and Solid Waste Engineering Design	3		
CENG 3321* Civil Construction Materials	3		
MENG 3320* Engineering Thermodynamics	3		
EVEG 4380* Environmental Engineering Design	3		
GENERAL ENGINEERING ELECTIVES: 9 HOURS			
Take 3 hours from:			
EVEG 4097* Environmental Engineering Research OR EVEG 4098* Environmental Engineering Internship	3		
Take one upper-division elective from:			
MENG, EVEG, CENG, or ENGR	3		
Take one upper-division EVEG elective:			
EVEG ELECTIVE	3		
MATH AND SCIENCE REQUIREMENTS: 28 HOURS			
MATH 2414* Calculus II PENV	4		
MATH 3340* Calculus III	3		
MATH 3342* Differential Equations I	3		
MATH 4361* Statistics for the Sciences	3		
PHYS 2425*, 2425L Calculus Physics I	4		
Take 8 hours from:			
BIOL 1406, 1407*, 1411, 1413, 2374*, 2420* or 2572*, 3374, 4425, 4510	8		
Take 3 hours from:			
GEOG/GESC 3308, 3313; GEOL 1403, 1404, 3312, 3350; PSES 2311, 4311	3		
TOTAL HOURS REQUIRED TO COMPLETE DEGREE	125		

Environmental Engineering Program admission requirements (PENV): overall GPA of at least 2.25; completion of the pre-engineering sequence (MATH 2413, 2414, CHEM 1411, 1412, ENGR 1301, 1304, 2301, and 2302) with a GPA of at least 2.75; and successful completion of entrance interview with a department adviser.

* Indicates prerequisites—see catalog for more information.

** Or an equivalent course (second year, second semester) in a foreign language.

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 – 2023-2024 Curriculum Guide

Major: Environmental Engineering, B.S.

Major Code: 135

Year 1: Fall	
CORE 10 (Communication) – ENGL 1301 or 1311 ¹	3
CORE 20 (Mathematics) – MATH 2413 Calculus I (PEN ^V 2) - 4 th hour counts towards Core 90	4
CORE 30 (Life & Phys. Sci.) - CHEM 1411 Chemistry I (PEN ^V 2)	3
CORE 90 (Component Area Option) – CHEM 1411L (PEN ^V 2)	1
ENGR 1301/1301L Fundamentals of Engineering (PEN ^V 2)	3
CORE – See checklist for options ¹	3
Total:	17

Year 1: Spring	
MATH 2414 Calculus II (PEN ^V 2)	4
ENGR 1304/1304L Engineering Graphics (PEN ^V 2)	3
CORE 30 (Life & Phys. Sci.) - CHEM 1412 Chemistry II (PEN ^V 2)	3
CORE 90 (Component Area Option) – CHEM 1412L (PEN ^V 2)	1
CORE 90 (Component Area Option) – ENGL 1302, 1312, or 2311	3
CS 1315 Programming Fundamentals	3
Total:	17

Year 2: Fall	
MATH 3340 Calculus III	3
ENGR 1375/1375L Principles of DC & AC Circuits	3
ENGR 2301 Engineering Statics (PEN ^V 2)	3
PHYS 2425/2425L Calculus Physics I	4
CORE – See checklist for options ¹	3
Total:	16

Year 2: Spring	
ENGR 2302 Engineering Dynamics (PEN ^V 2)	3
EVEG 2331 Introduction to Environmental Engineering	3
MATH 3342 Differential Equations I	3
BIOL Elective – Take 3-5 hours from (total for BIOL Electives must be 8 hrs): BIOL 1406, 1407, 1411, 1413, 2374, 2420 or 2572, 3374, 4425, 4510	3-5
CORE – See checklist for options ¹	3
Total:	16

Year 3: Fall	
ENGR 1171 Engineering Ethics	1
ENGR 3202 Fundamentals of Engineering Economics	2
EVEG 3304 Introduction to Fluid Mechanics for Civil & Environmental Engineers	3
EVEG 3344 Solid & Hazardous Waste Engineering Systems Design	3
GEOL/GESC/GEOL/PSES Elective – Take one course from: GESC 3308, 3313, GEOL 1403, 1404, 3312, 3350, PSES 2311, 4311	3-5
CORE – See checklist for options ¹	3
Total:	15-17

Year 3: Spring	
EVEG 3342 Principles of Water & Wastewater Treatment Design	3
EVEG 3343 Principles of Air Pollution Monitoring & Control	3
EVEG 3411 Water Resources Engineering	4
CORE – See checklist for options ¹	3
CORE – See checklist for options ¹	3
Total:	16

Year 4: Fall	
MENG, EVEG, CENG, or ENGR Elective (advanced)	3
EVEG 3361 Environmental Engineering Modeling & Design	3
EVEG 4097 or 4098	3
BIOL Elective – Take 3-5 hours from (total for BIOL Electives must be 8 hrs): BIOL 1406, 1407, 1411, 1413, 2374, 2420 or 2572, 3374, 4425, 4510	3-5
CORE – See checklist for options ¹	3
Total:	15-17

Year 4: Spring	
MATH 4361 Statistics for the Sciences	3
EVEG Elective (advanced)	3
EVEG 4380 Environmental Engineering Design	3
CORE – See checklist for options ¹	3
CORE – See checklist for options ¹	3
Total:	15

¹ **CORE:** Environmental Engineering 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 **(PEN^V): Environmental Engineering Program admission requirements:** overall GPA of at least 2.25; completion of the pre-environmental engineering sequence (MATH 2413, 2414, CHEM 1411, 1412, ENGR 1301, 1304, 2301, and 2302) with a GPA of at least 2.75; and successful completion of entrance interview with a department adviser.

Identified Marketable Skills	Top Three Local Employers or Industries/Professional Programs/Possible Career Opportunities
-------------------------------------	--

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.

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.