

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

**FPC** This symbol indicates courses that apply towards degree programs at WT. All core classes are offered at WTUC. 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:** \_\_\_\_\_

**Engineering Technology Option I—Renewable Energy Technology, Manufacturing/Industrial School of Engineering, Computer Science and Mathematics**  
**ECS Building, Room 119 651-5257**

<b>CORE CURRICULUM COURSES: 42 HOURS ♦</b>		<b>HRS</b>	<b>FPC</b>
<b>Communication (Core 10)</b>			
ENGL 1301 Introduction to Academic Writing and Argumentation		3	
COMM 1315, 1318, or 1321		3	
<b>Mathematics (Core 20)</b>			
See University Core Requirements below		(3)	
<b>Life and Physical Sciences (Core 30)</b>			
See University Core Requirements below		(6)	
<b>Language, Philosophy and Culture (Core 40)</b>			
ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312***, 2313*, 2315*, or 2371	<b>Choose 1</b>	3	
<b>Creative Arts (Core 50)</b>			
ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310	<b>Choose 1</b>	3	
<b>American History (Core 60)</b>			
HIST 1301, 1302, 2301, 2381	<b>Choose 2</b>	6	
<b>Government/Political Science (Core 70)</b>			
POSC 2305 and 2306		6	
<b>Social and Behavioral Sciences (Core 80)</b>			
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301	<b>Choose 1</b>	3	
<b>Institutionally Designated Option (Core 90)</b>			
See University Core Requirements below		(6)	
<b>ENGINEERING TECHNOLOGY OPTION I—INDUSTRIAL/ MANUFACTURING MAJOR REQUIREMENTS: 91 HOURS</b>			
A grade of "C" or better must be earned in all courses required for major.			
<b>UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦</b>			
<b>CORE 20</b>			
MATH 1316* Plane Trigonometry OR MATH 2412*[3] Pre-Calculus	<b>FPC</b>	3	
<b>CORE 30</b>			
PHYS 1401*[3] General Physics I AND PHYS 1402*[3] General Physics II	<b>FPC</b>	6	
OR			
PHYS 2425*[3] Calculus Physics I AND PHYS 2426*[3] Calculus Physics II			
<b>CORE 90</b>			
ENGL 2311* Introduction to Professional and Technical Communication	<b>FPC</b>	3	
<b>CORE 90</b>			
PHYS 1401L[1] and 1402L[1] OR PHYS 1425L[1] and 1426L[1]; MATH 2412[1] (or CHEM 1411L[1], 1412L[1] or MATH 2413[1] if MATH 1316 is taken for Core 20)		3	
<b>RENEWABLE ENERGY TECHNOLOGY MANUFACTURING/INDUSTRIAL REQUIREMENTS: 64 HOURS</b>			
ENGR 1171* Engineering Ethics		1	
ENGR 1301*, 1301L Fundamentals of Engineering		3	
ENGR 1304, 1304L Engineering Graphics		3	
ENGR 1375*, 1375L Principles of DC and AC Circuits		3	
ENGR 2301* Engineering Statics		3	
ENGR 2302* Engineering Dynamics		3	

**Bachelor of Science Degree**  
**BS.ENGR.TECH (112)**

ET 2371*, 2371L Materials and Fabrications/Metals and Ceramics	3	
ET 2372*, 2372L Materials and Fabrications/Plastics and Composites	3	
ET 2375*, 2375L Electronic Devices and Circuits	3	
ET 3301* Fundamentals of Manufacturing Technology	3	
ET 3360* Plant Design and Layout	3	
ET 4314 Industrial Quality Assurance	3	
ET 4370 Industrial Safety and Accident Prevention	3	
ET 4380* Design Implementation	3	
CHEM 1411*, 1411L (101) Chemistry I AND CHEM 1412*, 1412 (102) Chemistry II	<b>FPC</b>	8
MATH 2413* Calculus I	<b>FPC</b>	4
<b>Take four courses from:</b> ET/PHYS 3302 Wind Energy & Wind Turbines ET/PHYS 3303 Solar Energy ET 3315*, 3315L Digital Electronics ET 3330*, 3330L Fluid Power/Power Transmission ET 4301*, 4301L Machining Fundamentals ET 4311* Industrial Design and Ergonomics ET 4325*, 4325L Computer-Aided Drafting and Design ET 4330*, 4330L Numerical Control and Computer-Aided Manufacturing ET 4350 Renewable Energy ET 4351 Bioenergy ET 4352 Geothermal Energy	12	
<b>ADVANCED ELECTIVES: 12 HOURS</b> Select four upper-level ET courses (or CS, MGT, ENGR, MENG, CENG, EVEG or other courses after consulting with an adviser).		
ADVANCED ET COURSE (or other after advisor consultation)	3	
ADVANCED ET COURSE (or other after advisor consultation)	3	
ADVANCED ET COURSE (or other after advisor consultation)	3	
ADVANCED ET COURSE (or other after advisor consultation)	3	
<b>ELECTIVE: 2 HOURS (if needed to total 120 overall)</b>		
ELECTIVE - Three hours if MATH 1316 is taken for University core (Core 20).	2-3	
<b>MINIMUM HOURS REQUIRED TO COMPLETE DEGREE</b>	<b>120</b>	

♦ 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 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 (RELI) 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 encouraged to request an official degree plan by using the online [Degree Plan Request](#) form. The dean's office of the School of Engineering, Computer Science and Mathematics, located in the Engineering and Computer Science Building, Room 119 (or call 806-651-5257), can answer questions about the degree plan. Students who have completed 45 hours will not be allowed to progress without requesting a degree plan.**



First Year					
Fall		Spring			
H o u r s  15	CORE 10-ENGL 1301	3	H o u r s  17	CORE 90-ENGL 2311	3
	CORE 20-MATH 1316 or 2412	3		MATH 2413	4
	ENGR 1375	3		ENGR 1301	3
	ENGR 1304	3		CHEM 1411/1411L	4
	CORE 80 See Checklist for Options	3		CORE 50- See Checklist for Options	3

Second Year					
Fall		Spring			
H o u r s  16	ENGR 2301	3	H o u r s  16	ET 2375	3
	CORE 10-COMM 1315, 1318 or 1321	3		ET 2372	3
	ET 2371	3		CORE 30-LAB SCIENCE PHYS 1401/1401L	4
	CORE 60-HIST 1301, 1302, 2301 or 2381	3		ENGR 2302	3
	CHEM 1412/1412L	4		CORE 60-HIST 1301, 1302, 2301 or 2381	3

Third Year					
Fall		Spring			
H o u r s  13	CORE 70-POSC 2305 or 2306	3	H o u r s  16	CORE 70-POSC 2305 or 2306	3
	ENGR 1171	1		ET ELECTIVE See Checklist for Options	3
	ET 3360	3		ET 4314	3
	ET 4370	3		CORE 30-LAB SCIENCE PHYS 1402/1402L	4
	ET 3301	3		ET Elective	3

Fourth Year					
Fall		Spring			
H o u r s  15	FREE ELECTIVE	3	H o u r s  12	ET ADVANCED ELECTIVE After consulting with adviser	3
	ET 4380 See Checklist for Options	3		ET ADVANCED ELECTIVE After consulting with adviser	3
	ET ELECTIVE See Checklist for Options	3		ET ADVANCED ELECTIVE After consulting with adviser	3
	ET ELECTIVE See Checklist for Options	3		ET ADVANCED ELECTIVE After consulting with adviser	3
	CORE 40 See Checklist for Options	3			

**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 45 hours. Students should always seek the advice of their academic adviser before scheduling classes.