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

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

NAME:	WT ID:	DATE:
-------	--------	-------

## **Engineering Technology Option I—Renewable Energy** Technology, Manufacturing/Industrial College of Engineering

ECS Building, Room 119 651-5257					
CORE CURRICULUM COURSES: 42 HOURS ◆	HRS				
Communication (Core 10)					
ENGL 1301 Introduction to Academic Writing and Argumentation	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)	(6)				
ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST					
2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN	3				
2311, 2312*/**, 2313, 2315*, or 2371 Choose 1					
Creative Arts (Core 50)					
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for	3				
music majors), 1310; or THRE 1310 Choose 1	Ľ				
American History (Core 60)					
HIST 1301, 1302, 2301, 2381, 2382 Choose 2	6				
Government/Political Science (Core 70)					
POSC 2305 and 2306  Social and Behavioral Sciences (Core 80)	6	Ш			
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302;					
PSYC 2301; SOCI 1301 Choose 1	3				
Institutionally Designated Option (Core 90)					
See University Core Requirements below	(6)				
ENGINEERING TECHNOLOGY OPTION IINDUSTRIAL/ MANUFACTURING MAJOR REQUIREMENTS: 91 HOURS					
UNIVERSITY CORE REQUIREMENTS: 15 HOURS +					
CORE 20 MATH 1316* Plane Trigonometry OR MATH 2412*[3] Pre-Calculus	3				
CORE 30					
PHYS 1401*[3] General Physics I AND					
PHYS 1402*[3] General Physics II	6				
OR	O				
PHYS 2425*[3] Calculus Physics I AND PHYS 2426*[3] Calculus Physics II					
CORE 90 ENGL 2311* Introduction to Professional and Technical Communication	3				
CORE 90					
PHYS 1401L[1] and 1402L[1] <b>OR</b> PHYS 1425L[1] and	3				
1426L[1]; MATH 2412[1] (or CHEM 1411L[1], 1412L[1] or MATH 2413[1] if MATH 1316 is taken for Core 20)					
RENEWABLE ENERGY TECHNOLOGY MANUFACTURING/INDUSTRIAL REQUIREMENTS: 64 HOU	RS				
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				
ET 2371*, 2371L Materials and Fabrications/Metals and Ceramics	3				
3/11/2020					

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

ET 2372*, 2372L Materials and Fabrications/Plastics and Composites	3		
T 2375*, 2375L Electronic Devices and Circuits 3			
ET 3301* Fundamentals of Manufacturing Technology	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	8		
MATH 2413* Calculus I	4		
Take four courses from: 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 ADVANCED ELECTIVES: 12 HOURS Select four upper-level ET courses (or CS, MGT, ENGR, MENG, CENother courses after consulting with an adviser).	12 NG, EN	/EG or	
ADVANCED ET COURSE (or other after advisor consultation)	3		
ADVANCED ET COURSE (or other after advisor consultation)	3		
DVANCED ET COURSE (or other after advisor consultation) 3			
ADVANCED ET COURSE (or other after advisor consultation) 3			
ELECTIVE: 2 HOURS (if needed to total 120 overall)			
ELECTIVE - Three hours if MATH 1316 is taken for University core (Core 20).	2-3		
MINIMUM HOURS REQUIRED TO COMPLETE DEGREE	120		
		-	

- ◆ 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 (RELI) 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.

# 2020-2021 Curriculum Guide

# Engineering Technology - Option I—Renewable Energy Technology, Manufacturing/Industrial

Engineering and Computer Science Advising Services Bachelor of Science Degree BS.ENGR.TECH

Degree Plan Total Hours: Major Code: 112 ECS 119 651-5257 120

First Ye	First Year					
	Fall			Spring		
Н	CORE 10-ENGL 1301	3	H	CORE 90-ENGL 2311	3	
0			0			
u	CORE 20-MATH	3	u	MATH 2413	4	
r	1316 or 2412		r			
S	ENGR 1375	3	S	ENGR 1301	3	
15	ENGR 1304	3	17	CHEM 1411/1411L	4	
	CORE 80	3		CORE 50-	3	
	See Checklist for Options			See Checklist for Options		

Second	Second Year					
	Fall			Spring		
H	ENGR 2301	3	Н	ET 2375	3	
0			0			
u	CORE 10-COMM	3	u	ET 2372	3	
l r	1315, 1318 or 1321		l r			
s	ET 2371	3	S	CORE 30-LAB SCIENCE	4	
				PHYS 1401/1401L		
16	CORE 60-HIST	3	16	ENGR 2302	3	
10	1301, 1302, 2301 or 2381		10			
	CHEM 1412/1412L	4		CORE 60-HIST	3	
				1301, 1302, 2301 or 2381		
		, in the second			, in the second	

Third Y	Third Year					
	Fall			Spring		
	CORE 70-POSC	3		CORE 70-POSC	3	
H	2305 or 2306		H	2305 or 2306		
o u	ENGR 1171	1	0	ET ELECTIVE	3	
l r			u r	See Checklist for Options		
s	ET 3360	3	S	ET 4314	3	
13	ET 4370	3	16	CORE 30-LAB SCIENCE	4	
15			10	PHYS 1402/1402L		
	ET 3301	3		ET Elective	3	

Fourth	Fourth Year					
	Fall			Spring		
l	FREE ELECTIVE	3	l	ET ADVANCED ELECTIVE 3		
H			H	After consulting with adviser		
o u	ET 4380	3	0 U	ET ADVANCED ELECTIVE 3		
l r	See Checklist for Options		l r	After consulting with adviser		
S	ET ELECTIVE	3	S	ET ADVANCED ELECTIVE 3		
	See Checklist for Options			After consulting with adviser		
15	ET ELECTIVE	3	12	ET ADVANCED ELECTIVE 3		
13	See Checklist for Options		12	After consulting with adviser		
	CORE 40	3				
	See Checklist for Options					

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.