

**West Texas A&M University**  
**Advising Services**  
**Degree Checklist**  
**2026-2027**

(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 (806) 651-5257**

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

| CORE CURRICULUM COURSES: 42 HOURS   | HRS |  |  |
|---|-----|--|--|
| <b>Communication (Core 10)</b>  |     |  |  |
| ENGL 1301 Intro. To Academic Writing & Argumentation <b>OR</b><br>ENGL 1311 Writing About Ideas   | 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<br>2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN<br>2311*, 2312***, 2313*, 2315*, or 2371 <b>Choose 1</b>                            | 3   |  |  |
| <b>Creative Arts (Core 50)</b>  |     |  |  |
| ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for<br>music majors), 1310; or THRE 1310 <b>Choose 1</b>   | 3   |  |  |
| <b>American History (Core 60)</b>   |     |  |  |
| HIST 1301, 1302, 2381, 2382, 2301 <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;<br>GEOG 1302; PSYC 2301; SOCI 1301 <b>Choose 1</b>   | 3   |  |  |
| <b>Component Area Option (Core 90)</b>  |     |  |  |
| See University Core Requirements below  | (6) |  |  |
| <b>ENGINEERING TECHNOLOGY OPTION I—INDUSTRIAL /<br/>MANUFACTURING MAJOR REQUIREMENTS: 93 HOURS</b><br>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><br>MATH 1316* Plane Trigonometry <b>OR</b><br>MATH 2412*[3] Pre-Calculus   | 3   |  |  |
| <b>CORE 30</b><br>PHYS 1401*[3] General Physics I <b>AND</b><br>PHYS 1402*[3] General Physics II<br><b>OR</b><br>PHYS 2425*[3] Calculus Physics I <b>AND</b><br>PHYS 2426*[3] Calculus Physics II | 6   |  |  |
| <b>CORE 90</b><br>ENGL 1302* Academic Writing and Research <b>OR</b><br>ENGL 2311* Intro. to Professional and Technical Comm.   | 3   |  |  |
| <b>CORE 90</b><br>PHYS 1401L[1] and 1402L[1] <b>OR</b> PHYS 1425L[1] and<br>1426L[1]; MATH 2412[1] (or CHEM 1411L[1], 1412L[1] or MATH<br>2413[1] if MATH 1316 is taken for Core 20)              | 3   |  |  |
| <b>OPTION I—RENEWABLE ENERGY TECHNOLOGY,<br/>MANUFACTURING / INDUSTRIAL REQUIREMENTS: 53 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 3202* Fundamentals of Engineering Economics  | 2   |  |  |
| ENGR 3371*, 3371L Materials & Fabric./Metals & Ceramics   | 3   |  |  |

|  |    |  |            |
|--|----|--|------------|
| ET 2375*, 2375L Electronic Devices and Circuits  | 3  |  |            |
| ET 3301* Fundamentals of Manufacturing Technology  | 3  |  |            |
| ET 3360* Plant Design and Layout   | 3  |  |            |
| ET 3372*, 3372L Materials & Fabric./Plastics & Composites  | 3  |  |            |
| ET 4314 Industrial Quality Assurance   | 3  |  |            |
| ET 4320* Princ. of Programming, Controllers, & Automation  | 3  |  |            |
| ET 4370 Industrial Safety and Accident Prevention  | 3  |  |            |
| ET 4380* Design Implementation   | 3  |  |            |
| CHEM 1411*, 1411L Chemistry I  | 4  |  |            |
| MATH 2413* Calculus I  | 4  |  |            |
| MATH 3360* Statistical Methods   | 3  |  |            |
| <b>RENEWABLE ENERGY TECHNOLOGY ELECTIVES: 12 HOURS</b>   |    |  |            |
| ET/PHYS 3302 Wind Energy and Wind Turbines   | 3  |  |            |
| ET/PHYS 3303 Solar Energy: Residence & Rural Systems   | 3  |  |            |
| ET 4350 Renewable Energy   | 3  |  |            |
| ET 4353* Energy Management   | 3  |  |            |
| <b>MANUFACTURING / INDUSTRIAL ELECTIVES: 12 HOURS</b>  |    |  |            |
| <b>Take 4 courses from:</b>  |    |  |            |
| ET 3370* Engineering Product Design  | 12 |  |            |
| ET 4311* Industrial Design and Ergonomics  |    |  |            |
| ET 4325*, 4325L Computer-Aided Drafting and Design   |    |  |            |
| ET 4330*, 4330L Numerical Control & Computer-Aided Man.<br>ET 4342* Engineering Reliability<br>(or CS, MGT, ENGR, MENG, EVEG, CENG, AGRI or other courses<br>after consulting with an adviser) |    |  |            |
| <b>GENERAL ELECTIVES: 1 HOUR</b>   |    |  |            |
| Take one elective in CS, ENGR, ET, CENT, EENG, EVEG,<br>MENG or AGRI (or other courses after consulting with an<br>adviser).   | 1  |  |            |
| <b>MINIMUM HOURS REQUIRED TO COMPLETE DEGREE</b>   |    |  | <b>120</b> |

\* 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 – 2026-2027 Curriculum Guide**

**Major: Engineering Technology – Option I**

**BS.ENGR.TECH (112)**

**Renewable Energy Technology, Manufacturing/Industrial, B.S.**

| <b>Year 1: Fall</b>  |              | <b>Year 1: Spring</b>  |           |
|--|--------------|--|-----------|
| CORE 10 (Communication) – ENGL 1301 or 1311  | 3            | CORE 30 (Life & Phys. Sci.) – PHYS 1402 or PHYS 2426   | 3         |
| CORE 10 (Communication) – COMM 1315, 1318 or 1321  | 3            | CORE 90 (Component Area Opt.) – PHYS 1402L or PHYS 2426L   | 1         |
| CORE 20 (Mathematics – MATH 1316 or MATH 2412  | 3            | MATH 2413 Calculus I   | 4         |
| CORE 30 (Life & Phys. Sci.) – PHYS 1401 or PHYS 2425   | 3            | ENGR 1171 Engineering Ethics   | 1         |
| CORE 90 (Component Area Opt.) – PHYS 1401L or PHYS 2425L   | 1            | ENGR 1304/1304L Engineering Graphics   | 3         |
| ENGR 1301/1301L Fundamentals of Engineering  | 3            | ENGR 1375/1375L Principles of DC and AC Circuits   | 3         |
| <b>Total:</b>  | <b>16</b>    | <b>Total:</b>  | <b>15</b> |
| <b>Year 2: Fall</b>  |              | <b>Year 2: Spring</b>  |           |
| CORE 90 (Component Area Opt.) – ENGL 1302, 1312 or 2311  | 3            | CORE 40 (Language, Philosophy & Culture) <sup>1</sup>  | 3         |
| ENGR 2301 Engineering Statics  | 3            | ET 2375/2375L Electronic Devices and Circuits  | 3         |
| ENGR 3202 Fundamentals of Engineering Economics  | 2            | ET 3301 Fundamentals of Manufacturing Technology   | 3         |
| ENGR 3371/3371L Materials & Fabrication - Metals & Ceramics  | 3            | ET 3372/3372L Materials & Fabrication – Plastics & Composites  | 3         |
| CHEM 1411/1411L Chemistry I  | 4            | ET 4314 Industrial Quality Assurance   | 3         |
| <b>Total:</b>  | <b>15</b>    | <b>Total:</b>  | <b>15</b> |
| <b>Year 3: Fall</b>  |              | <b>Year 3: Spring</b>  |           |
| CORE 50 (Creative Arts) <sup>1</sup>   | 3            | CORE 60 (American History) <sup>1</sup>  | 3         |
| ET 3360 Plant Design and Layout  | 3            | MATH 3360 Statistical Methods  | 3         |
| ET 4320 Principles of Programming, Controllers & Automation  | 3            | ET 4370 Industrial Safety and Accident Prevention  | 3         |
| Renewable Energy Technology Electives – Take 1 <sup>st</sup> course:<br>ET 3302, ET 3303, ET 4350, ET 4353         | 3            | Renewable Energy Technology Electives – Take 2 <sup>nd</sup> course:<br>ET 3302, ET 3303, ET 4350, ET 4353         | 3         |
| Manufacturing/Industrial Electives – Take 1 <sup>st</sup> of 4 courses from:<br>ET 3370, 4311, 4325, 4330, or 4342 | 3            | Manufacturing/Industrial Electives – Take 2 <sup>nd</sup> of 4 courses from:<br>ET 3370, 4311, 4325, 4330, or 4342 | 3         |
| <b>Total:</b>  | <b>15</b>    | <b>Total:</b>  | <b>15</b> |
| <b>Year 4: Fall</b>  |              | <b>Year 4: Spring</b>  |           |
| CORE 60 (American History) <sup>1</sup>  | 3            | CORE 70 (Govt./Political Science) – POSC 2306 <sup>1</sup>   | 3         |
| CORE 70 (Govt./Political Science) – POSC 2305 <sup>1</sup>   | 3            | CORE 80 (Social & Behavioral Sciences) <sup>1</sup>  | 3         |
| Renewable Energy Technology Electives – Take 3 <sup>rd</sup> course:<br>ET 3302, ET 3303, ET 4350, ET 4353         | 3            | ET 4380 Design Implementation  | 3         |
| Manufacturing/Industrial Electives – Take 3 <sup>rd</sup> of 4 courses from:<br>ET 3370, 4311, 4325, 4330, or 4342 | 3            | Renewable Energy Technology Electives – Take 4 <sup>th</sup> course:<br>ET 3302, ET 3303, ET 4350, ET 4353         | 3         |
| General Elective   | 1-3          | Manufacturing/Industrial Electives – Take 4 <sup>th</sup> of 4 courses from:<br>ET 3370, 4311, 4325, 4330, or 4342 | 3         |
| <b>Total:</b>  | <b>13-15</b> | <b>Total:</b>  | <b>15</b> |

<sup>1</sup> **CORE:** Engineering Technology 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 for options). Apart from the major-specific core requirements, there is no set order in which core courses must be taken.

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

**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.