

**West Texas A&M University
Advising Services
Degree Checklist
2017-2018**

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

NAME: _____ WT ID: _____ DATE: _____

Electrical Engineering (see ⚡ note below)
School of Engineering, Computer Science & Mathematics
ECS Building, Room 119 651-5257

**Bachelor of Science Degree
 Engineering and Computer Science
 BS.EENG (840)
 Pre-Engineering: PRE.ENGR (128) (see ⚡ below)**

| CORE CURRICULUM COURSES: 42 HOURS ♦ | | HRS |
|--|----------|-----|
| Communication (10) | | |
| ENGL 1301 Introduction to Academic Writing and Argumentation | | 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; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371 | Choose 1 | 3 |
| Creative Arts (50) | | |
| ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 | Choose 1 | 3 |
| American History (60) | | |
| HIST 1301, 1302, 2301, 2381 | 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; PSYC 2301; SOCI 1301 | Choose 1 | 3 |
| Component Area Option (90) | | |
| See University Core Requirements below | | (6) |
| ELECTRICAL ENGINEERING MAJOR REQUIREMENTS: 93 HOURS | | |
| • A grade of "C" or better must be earned in all courses required for major. • A grade of "C" or better is required for all prerequisites listed for ECSM courses required for EENG majors. | | |
| UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦ | | |
| CORE 20 MATH 2413*[3] Calculus I | PEEN | 3 |
| CORE 30 CHEM 1411*[3], Chemistry I | | 3 |
| CORE 30 PHYS 2425*[3] Calculus Physics I | PEEN | 3 |
| CORE 90 ENGL 2311* Introduction to Professional and Technical Communication | | 3 |
| CORE 90 MATH 2413[1]; CHEM 1411L[1]; PHYS 2425L[1] | | 3 |
| ENGINEERING CORE CURRICULUM: 15 HOURS | | |
| ENGR 1171* Engineering Ethics | | 1 |
| ENGR 1301*, 1301L Fundamentals of Engineering | PEEN | 3 |
| ENGR 1375*, 1375L Principles of DC & AC Circuits | PEEN | 3 |
| EENG 2350* Intro. of Electronic Devices & Circuits | PEEN | 3 |
| ENGR 3202* Fundamentals of Engineering Economics | | 2 |
| CS 1315* Programming Fundamentals | PEEN | 3 |
| MAJOR REQUIREMENTS: 40 HOURS | | |
| EENG 2341* Fundamentals of Electromagnetics | | 3 |
| EENG 2475* Signals and Systems I | | 4 |
| EENG 3305* Digital Design Fundamentals | | 3 |

| | | |
|--|------|------------|
| EENG 3334* Circuits II | | 3 |
| EENG 3340* Electronics I | | 3 |
| EENG 3355* Control Systems | | 3 |
| EENG 3360* Energy Systems and Power Electronics | | 3 |
| EENG 4370* Electrical Power Devices | | 3 |
| EENG 4371* Power System Analysis | | 3 |
| EENG 4372* Power Electronics and Power Management | | 3 |
| EENG 4373* Electrical Machinery | | 3 |
| EENG 4380* Senior Design I | | 3 |
| EENG 4381* Senior Design II | | 3 |
| MATH AND SCIENCE REQUIREMENTS: 20 HOURS | | |
| PHYS 2426*, PHYS 2426L Calculus Physics II | PEEN | 4 |
| MATH 2414* Calculus II | PEEN | 4 |
| MATH 3340* Calculus III | | 3 |
| MATH 3342* Differential Equations I | | 3 |
| MATH 3311* Linear Algebra | | 3 |
| PHYS 3340* Electricity and Magnetism I | | 3 |
| ELECTRICAL ENGINEERING ELECTIVES: 6 HOURS | | |
| Take six hours from: | | |
| EENG 3341* Electromagnetic Fields and Waves | 6 | |
| EENG 3352* Properties of Electronic Materials | | |
| EENG 3354* VLSI Design | | |
| EENG 3375* Signals and Systems II | | |
| EENG 4363* Electrical Power Plants | | |
| GENERAL ELECTIVE: 3 HOURS | | |
| Take one elective in CS, ENGR, ET, CENG, EENG, EVEG or MENG. | | 3 |
| MINIMUM HOURS REQUIRED TO COMPLETE DEGREE | | 126 |

⚡ **Electrical Engineering Program admission requirements (PEEN):** overall GPA of at least 2.25; completion of the pre-engineering sequence (MATH 2413, 2414, PHYS 2425, 2426, ENGR 1301, CS 1315, ENGR 1375, EENG 2350) with a GPA of at least 2.75; and successful completion of the entrance interview with a department adviser.

♦ 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.

*** Cannot repeat course content required elsewhere.

NOTE: At least 39 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU; 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 a maximum of 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.