

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

CC This symbol indicates courses that apply towards degree programs at WT. All core classes are offered at CC. 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:** _____

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

| CORE CURRICULUM COURSES: 42 HOURS ♦ | | HRS | CC |
|--|-----------------|------------|-----------|
| 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; MCOM 1307; 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: 92 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 required for all prerequisites listed for ECSM courses required for EENG majors. | | | |
| UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦ | | | |
| CORE 20 MATH 2413*[3] Calculus I | CC PEEN | 3 | |
| CORE 30 CHEM 1411*, 1411L Chemistry I | CC | 3 | |
| CORE 30 PHYS 2425*[3] Calculus Physics I | CC PEEN | 3 | |
| CORE 90 ENGL 2311* Introduction to Professional and Technical Communication | CC | 3 | |
| CORE 90 MATH 2413[1]; CHEM 1411L[1], PHYS 2425L[1] | PEEN | 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 | |
| ENGR 2350* Intro. of Electronic Devices & Circuits | PEEN | 3 | |
| ENGR 3202* Fundamentals of Engineering Economics | | 2 | |
| CS 1315* Programming Fundamentals | PEEN | 3 | |
| MAJOR REQUIREMENTS: 39 HOURS | | | |
| EENG 2341* Linear Integrated Circuits and Applications | | 3 | |
| EENG 2375* Signals and Systems I | | 3 | |
| EENG 3305* Digital Design Fundamentals | | 3 | |

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

| | | | |
|--|----------------|------------|--|
| EENG 3334* Circuits II | | 3 | |
| EENG 3340* Electronics I | | 3 | |
| EENG 3355* Control Systems | | 3 | |
| EENG 3360* Electromechanical Systems | | 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 4374* Electrical and Electronics Circuits Design | | 3 | |
| EENG 4380* Senior Design | | 3 | |
| MATH AND SCIENCE REQUIREMENTS: 20 HOURS | | | |
| PHYS 2426*, PHYS 2426L Calculus Physics II | CC PEEN | 4 | |
| MATH 2414* Calculus II | CC PEEN | 4 | |
| MATH 3340* Calculus III | CC | 3 | |
| MATH 3342* Differential Equations I | CC | 3 | |
| MATH 3311* Linear Algebra | CC | 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 | | 125 | |

⚡ **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, ENGR 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.

B.S Electrical Engineering

