

**West Texas A&M University
Advising Services
Degree Checklist
2018-2019**

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

NAME: _____ WT ID: _____ DATE: _____

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

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; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312**/**, 2313*, 2315*, or 2371		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)
MECHANICAL ENGINEERING MAJOR REQUIREMENTS: 95 HOURS		
• A grade of "C" or better must be earned in all courses required for major.		
• A grade of "C" or better is mandatory for all prerequisites listed for ECS courses required for MENG majors.		
UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦		
CORE 20		
MATH 2413*[3] Calculus I	PME	3
CORE 30		
PHYS 2425*[3] Calculus Physics I AND PHYS 2426*[3] Calculus Physics II	PME	6
CORE 90		
ENGL 2311* Introduction to Professional and Technical Communication		3
CORE 90		
MATH 2413[1]; PHYS 2425L[1], PHYS 2426L[1]		3
MECHANICAL ENGINEERING REQUIREMENTS: 80 HOURS		
ENGR 1171* Engineering Ethics		1
ENGR 1301*, 1301L Fundamentals of Engineering	PME	3
ENGR 1304 (125), 1304L Engineering Graphics		3
ENGR 1375*, 1375L Principles of DC and AC Circuits		3
ENGR 2301* Engineering Statics	PME	3
ENGR 2302* Engineering Dynamics	PME	3
ENGR 2332* Mechanics of Materials I		3
ENGR 3202* Fundamentals of Engineering Economics		2
ENGR 3305*, 3305L Modern Engineering Tools		3

Bachelor of Science Degree
BS.MECH.ENGR (129)
PRE.ENGR (128)

MENG 3320* Engineering Thermodynamics		3
MENG 4304* Fundamentals of Fluid Mechanics		3
MENG 4330* Mechanical Vibration & Control Theory		3
MENG 4350* Advanced Mechanics and Design		3
MENG 4352* Thermal-Fluid Systems Design		3
MENG 4360* Heat Transfer		3
MENG 4380* Mechanical Engineering Design		3
CHEM 1411*, 1411L Chemistry I		4
CS 1315* Programming Fundamentals OR CS 1337, 1337L Intro. to Object-Oriented Prog.	PME	3
ET 2371* 2371L Materials and Fabrication/Metals and Ceramics		3
MATH 2414* Calculus II	PME	4
MATH 3340* Calculus III		3
MATH 3342* Differential Equations I		3
MENG ELECTIVE		3
MENG ELECTIVE		3
Take two courses from:		
MATH 3311* Linear Algebra		6
MATH 3343* Differential Equations II		
MATH 4340* Complex Variables I		
MATH 4341* Advanced Calculus		
MATH 4361* Statistics for the Sciences		
MATH 4362* Introduction to Numerical Analysis		
PHYS 3310* Modern Physics I		6
PHYS 4310* Modern Physics II		
PHYS 4330* Optics		
CS, ENGR, ET, CENG, EVEG OR MENG ELECTIVE***		3
MINIMUM HOURS REQUIRED TO COMPLETE DEGREE		122

⚡ **Mechanical Engineering Program admission requirements (PME):** overall GPA of at least 2.25; completion of the pre-engineering sequence (MATH 2413, 2414, PHYS 2425, 2426, ENGR 1301, 2301, 2302 and CS 1315 or 1337) 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.


West Texas A&M University™
B.S. MECHANICAL ENGINEERING

