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

FFC This symbol indicates courses that apply towards degree programs at WT. All core classes are offered at AQUC. 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.

Ν	Α	М	Е	:

WT ID:

DATE:

## Civil Engineering (see & note below) School of Engineering, Computer Science and Mathematics

## ECS Building, Room 119 651-5257 CORE CURRICULUM COURSES: 42 HOURS + HRS FPC Communication (Code 10) ENGL 1301 Introduction to Academic Writing and 3 Argumentation 3 COMM 1315, 1318, or 1321 Mathematics (Code 20) See University Core Requirements below (3) Life and Physical Sciences (Code 30) (6) See University Core Requirements below Language, Philosophy and Culture (Code 40) 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 (Code 50) ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 3 1307, MUSI 1310; or THRE 1310 Choose 1 American History (Code 60) HIST 1301, 1302, 2301, 2381 Choose 2 6 Government/Political Science (Code 70) POSC 2305 and 2306 6 Social and Behavioral Sciences (Code 80) AGBE 2317\*; COMM 2377; CRIJ 1301; ECON 2301, 2302; 3 PSYC 2301; SOCI 1301 Choose 1 Component Area Option (Code 90) See University Core Requirements below (6) **CIVIL ENGINEERING MAJOR REQUIREMENTS: 99 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 ECSM courses required for Civil Engineering majors. UNIVERSITY CORE REQUIREMENTS: 15 HOURS + CORE 20 FPC PCE 3 MATH 2413\*[3] Calculus I CORE 30 CHEM 1411\*, 1411L Chemistry I FPC PCE 6 CHEM 1412\*, 1412L Chemistry II PCE CORE 90 ENGL 2311\* Introduction to Professional and Technical 3 Communication CORE 90 3 PCE MATH 2413[1], CHEM 1411L[1], CHEM 1412L[1] **CIVIL ENGINEERING REQUIREMENTS: 63 HOURS** 1 ENGR 1171\* Engineering Ethics PCE ENGR 1301\*,1301L Fundamentals of Engineering 3 ENGR 1304, 1304L Engineering Graphics PCE 3 ENGR 2301\* Engineering Statics PCE 3 ENGR 2302\* Engineering Dynamics PCE 3 ENGR 2332\* Mechanics of Materials I 3 2 ENGR 3202\* Fundamentals of Engineering Economics CENG/EVEG 2331\* Introduction to Environmental 3 Engineering CENG/EVEG 3404\* Fluid Mechanics for Civil and 4 **Environmental Engineers** 3 CENG 2361\* Surveying CENG/EVEG 3311\* Water Resources Engineering 3

## Bachelor of Science Degree BS.CIVIL.ENGR (130) PRE.ENGR (128)

CENG 3321* Civil Construction Materials	3	
CENG 3341* Geotechnical Engineering	3	
CENG 3351* Structural Analysis I	3	
CENG 3362* Transportation Engineering	3	
CENG 4380* Civil Engineering Senior Design	3	
PHYS 2425*, 2425L Calculus Physics I FPC	4	
CS 1315* Programming Fundamentals <b>OR</b> CS 1337, 1337L Intro. to Object-Oriented Programming	3	
MATH 2414* Calculus II FPC PCE	4	
MATH 3340* Calculus III FPC	3	
MATH 3342* Differential Equations I	3	
ELECTIVES: 21-23 HOURS		
CENG structural design elective	3	
CENG general elective	3	
CENG design elective	3	
Take one upper-level elective selected from:MATH 3311* Linear AlgebraMATH 3343* Differential Equations IIMATH 3343* Differential Equations IIMATH 4340* Complex Variables IMATH 4341* Advanced CalculusMATH 4361* Statistics for the SciencesMATH 4362* Introduction to Numerical AnalysisPHYS 3310* Modern Physics IPHYS 4310* Modern Physics IIPHYS 430* OpticsPHYS 4340* Mathematical MethodsPHYS 4397* Advanced Physics Elective	3	
One elective in ENGR, CENG, EENG, EVEG or MENG	3	
Take two natural science electives from:     FPC       PHYS 2426;     BIOL 1406, 1407*, 1411, 1413, 2420 or 2572, 4425, 4510;     GEOL 1403, 1404, 2471, 2475, 3311, 3312, 3350		
MINIMUM HOURS REQUIRED TO COMPLETE DEGREE	126	
a a Civil Engineering Program admission requirements (PCE), over		

*a*∽ **Civil Engineering Program admission requirements (PCE):** overall GPA of at least 2.25; completion of the pre-engineering sequence (MATH 2413, 2414, CHEM 1411, 1412, ENGR 1301, 1304, 2301, and 2302) with a GPA of at least 2.75; and successful completion of 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. 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 <u>Degree Plan</u><u>Request</u> 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.