

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

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

NAME: _____ **WT ID:** _____ **DATE:** _____

Computer Science—Enterprise Systems Track
Engineering and Computer Science
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	(4)	
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)	
COMPUTER SCIENCE—ENTERPRISE SYSTEMS TRACK REQUIREMENTS: 94 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 Computer Science majors.		
UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦		
CORE 20		
MATH 2413*[3] Calculus I	3	
CORE 30		
CHEM 1411*[3] and 1412*[3] OR PHYS 2425*[3] and 2426*[3]	6	
CORE 90		
ENGL 2311* Introduction to Professional and Technical Communication	3	
CORE 90		
MATH 2413[1] AND CHEM 1411L[1] and 1412L[1] OR PHYS 2425L[1] and 2426L[1]	3	
MAJOR REQUIREMENTS: 45 HOURS		
CS 1301 Introduction to Computer Science	3	
CS 1337, 1337L Introduction to Object-Oriented Programming	3	
CS 2325*, 2325L Computer Organization and Assembly Language	3	
CS 2336*, 2336L Objects and Data Abstraction	3	
CS 3305* Data Structures and Algorithms	3	
CS 3307* Algorithm Design and Analysis	3	
CS 3310* Programming Languages	3	
CS 3315* Scripting Languages	3	

Bachelor of Science Degree
BS.CS.ENT.SYS (307)

CS 3352* Operating Systems and Networking	3	
CS 3372* Net-Centric Computing	3	
CS 4325* Computer Architecture	3	
CS 4340* Database Systems Use, Design and Implementation	3	
CS 4385* Concurrency and Distributed Systems	3	
CS 4390* Software Development & Systems Prog.	3	
CS 4391* Software Development & Prof. Practice	3	
REQUIRED MATH COURSES: 16 HOURS		
MATH 2321* Discrete Structures I	3	
MATH 2322* Discrete Structures II	3	
MATH 2414* Calculus II	4	
Take 6 hours from:		
MATH 3311* Linear Algebra	6	
MATH 3321* Probability and Finite Mathematics		
MATH 3325* Introduction to Proofs		
MATH 3340* Calculus III		
MATH 3342* Differential Equations I		
MATH 3343* Differential Equations II		
MATH 4310* Modern Algebra with Cryptography		
MATH 4340* Complex Variables I		
MATH 4341* Advanced Calculus		
MATH 4361* Statistics for the Sciences		
MATH 4362* Introduction to Numerical Analysis		
ENTERPRISE SYSTEMS TRACK: 18 HOURS		
CS 3303* Object-Oriented Software Development	3	
CS 3321* Introduction to Enterprise Systems	3	
CS 3322* Enterprise Systems Application Development	3	
CS 4321* Enterprise Systems Assembler Programming	3	
CS 4322* Advanced Topics in Enterprise Systems	3	
CS 4360* Approaches to Internet and Computer Networks Security	3	
TOTAL HOURS REQUIRED TO COMPLETE DEGREE	121	

♦ 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.

** Recommended.

*** 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, and 30 of the final 36 hours counted toward the degree must be earned at WTAMU. A maximum of six semester hours in religion and 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.