

West Texas A&M University
Advising Services
Degree Checklist
2020-2021

(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 (Core 10)		
ENGL 1301 Introduction to Academic Writing and Argumentation	3	
COMM 1315, 1318, or 1321**	3	
Mathematics (Core 20)		
See University Core Requirements below	(4)	
Life and Physical Sciences (Core 30)		
See University Core Requirements below	(6)	
Language, Philosophy and Culture (Core 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 (Core 50)		
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 Choose 1	3	
American History (Core 60)		
HIST 1301, 1302, 2301, 2381 Choose 2	6	
Government/Political Science (Core 70)		
POSC 2305 and 2306	6	
Social and Behavioral Sciences (Core 80)		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1	3	
Component Area Option (Core 90)		
See University Core Requirements below	(6)	
COMPUTER SCIENCE—ENTERPRISE SYSTEMS TRACK REQUIREMENTS: 94 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 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 must request an official degree plan (using the online [Degree Plan Request](#) form) in order to progress. Students who have questions about their degree plan should contact the office of the dean of the College of Engineering, located in the Engineering and Computer Science Building, Room 119 (or call 806-651-5257).

WTAMU ADVISING SERVICES

2020-2021 Curriculum Guide

Major: Computer Science - Enterprise Sys. Track, B.S.

Major Code: 307

First Year Boldface type indicates major requirements.																																					
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Degree Total Hours 121

DISCLAIMER: This curriculum guide should be used in conjunction with the corresponding degree checklist for general planning purposes only. The degree checklist (later a student's official degree plan) should be referred to as the comprehensive list of all courses required for the degree. An official degree plan is required after completing 30 hours. Students should always seek the advice of their academic adviser before scheduling classes.

Identified Marketable Skills:

Top 3 Local Employers or Industries/Professional Programs/Possible Career Opportunities

Prerequisites/Important Sequences/Other degree Notes:

Note 1 - CORE: Computer Science majors are required to take specific course Core 20, Core 30, and Core 90. For all other core categories, they may select from any available options (see degree checklist). Apart from the major-specific core requirements, there is no set order in which core courses must be taken.

Note 2: MATH Electives: MATH 3311, 3321, 3325, 3340, 3342, 3343, 4310, 4340, 4341, 4361, or 4362.