West Texas A&M University
Advising Services
Degree Checklist
2026-2027
(For assistance completing this form, contact Advising Services at 806-651-5300)

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

Computer Science—Enterprise Systems Track
College of Engineering
ECS Building, Room 119 (806) 651-5257

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

CORE CURRICULUM COURSES: 42 HOURS	HRS		
Communication (Code 10)			
ENGL 1301 Intro. To Academic Writing & Argumentation **OR** ENGL 1311 Writing About Ideas	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 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 **Choose 1**	3		
American History (60)			
HIST 1301, 1302, 2381, 2382, 2301 **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; GEOG 1302; 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 MATH 2413[1] **AND** CHEM 1411L[1] and 1412L[1] **OR** PHYS 2425L[1] and 2426L[1]	3		
CORE 90 ENGL 1302* Academic Writing and Research **OR** ENGL 2311* Intro. to Professional and Technical Comm.	3		
MAJOR REQUIREMENTS: 51 HOURS			
CS 1301, 1301L Introduction to Computer Science	3		
CS 1337, 1337L Programming Principles I **OR** CIDM 2315 Programming Business Applications	3		
CS 2337*, 2337L Programming Principles II	3		
CS 3303* Object-Oriented Software Development	3		
CS 3305* Data Structures and Algorithms	3		
CS 3307* Algorithm Design and Analysis	3		
CS 3310* Programming Languages	3		
CS 3325*, 3325L Computer Org. and Assembly Language	3		
CS 3340* Software Engineering **OR** CIDM 4360* Object-Oriented Analysis and Design	3		
CS 3350* Database Systems Use, Design & Implement. **OR** CIDM 3350* Database Systems Design	3		
CS 3352* Operating Systems and Networking	3		
CS 3372 Net-Centric Computing **OR** CIDM 3385 Network Security & Data Communications	3		
CS 4325* Computer Architecture	3		
CS 4360* Approaches to Internet and Computer Networks Security	3		
CS 4385* Concurrency and Distributed Systems	3		
CS 4390* Senior Capstone Project I	3		
CS 4391* Senior Capstone Project II	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 MATH 3321* Probability MATH 3325* Introduction to Proofs MATH 3340* Calculus III MATH 3342* Differential Equations I 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	6		
ENTERPRISE SYSTEMS TRACK: 12 HOURS			
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 of Enterprise Systems	3		
TOTAL HOURS REQUIRED TO COMPLETE DEGREE	**121**		

* Indicates prerequisites—see catalog for more information.
** Recommended.
*** Or an equivalent course (second year, second semester) in a foreign language.

NOTE: Required math prerequisites, if not completed during high school or by ACT/SAT scores:
- MATH 1314 College Algebra **OR** MATH 1324 Mathematics for Business and Economics I
- MATH 1316 Plane Trigonometry **OR** MATH 2412 Pre-Calculus Math

NOTE: This is NOT a degree plan. All undergraduate students must request an official degree plan from their academic dean's office by the time they have completed 30 credit hours.

WTAMU ADVISING SERVICES – 2026-2027 Curriculum Guide

Major: Computer Science – Enterprise Systems Track, B.S. BS.CS.ENT.SYS (307)

Year 1: Fall	
CS 1301, 1301L Introduction to Computer Science	3
CORE 10 (Communication) – ENGL 1301 or 1311	3
CORE 10 (Communication) – COMM 1315, 1318 or 1321	3
CORE 40 (Lang., Phil. & Culture) – See checklist for options[1]	3
CORE 60 (American History) – See checklist for options[1]	3
Total:	15

Year 1: Spring	
CS 1337/1337L Programming Principles I **or** CIDM 2315 Programming Business Applications	3
CORE 20 (Mathematics) – MATH 2413 Calculus I	4
CORE 60 (American History) – See checklist for options[1]	3
CORE 80 (Soc. & Behav. Sci.) – See checklist for options[1]	3
CORE 90 (Component Area Option) – ENGL 1302, 1312 or 2311	3
Total:	16

Year 2: Fall	
CS 2337/2337L Programming Principles II	3
MATH 2321 Discrete Structures I	3
MATH 2414 Calculus II	4
CORE 30 (Life & Phys. Sci.) – CHEM 1411 **or** PHYS 2425	3
CORE 70 (Govt./Political Sci.) – POSC 2305	3
CORE 90 (Component Area Option) – CHEM 1411L **or** PHYS 2425L	1
Total:	17

Year 2: Spring	
CS 3305 Data Structures & Algorithms	3
CS 3325/3325L Computer Organization & Assembly Language	3
MATH 2322 Discrete Structures II	3
CORE 30 (Life & Phys. Sci.) – CHEM 1412 **or** PHYS 2426	3
CORE 70 (Govt./Political Sci.) – POSC 2306	3
CORE 90 (Component Area Option) – CHEM 1412L **or** PHYS 2426L	1
Total:	16

Year 3: Fall	
CS 3307 Algorithm Design & Analysis	3
CS 3310 Programming Languages	3
CS 3321 Introduction to Enterprise Systems	3
CS 3352 Operating Systems & Networking	3
CS 3372 Net-Centric Computing **or** CIDM 3385 Network Security & Data Communications	3
Total:	15

Year 3: Spring	
CS 3303 Object-Oriented Software Development	3
CS 3322 Enterprise Systems Application Development	3
CS 3340 Software Engineering **or** CIDM 4360 Object-Oriented Analysis & Design	3
CS 4325 Computer Architecture	3
Take 1st of 2 courses from: MATH 3311, 3321, 3325, 3340, 3342, 4310, 4340, 4341, 4361, or 4362	3
Total:	15

Year 4: Fall	
CS 3350 Database Systems Use, Design & Implementation or CIDM 3350 Database Systems Design	3
CS 4321 Enterprise Systems Assembler Programming	3
CS 4390 Senior Capstone Project I	3
Take 2nd of 2 courses from: MATH 3311, 3321, 3325, 3340, 3342, 4310, 4340, 4341, 4361, or 4362	3
CORE 50 (Creative Arts) – See checklist for options[1]	3
Total:	15

Year 4: Spring	
CS 4322 Advanced Topics of Enterprise Systems	3
CS 4360 Approaches to Internet & Computer Networks Security	3
CS 4385 Concurrency & Distributed Systems	3
CS 4391 Senior Capstone Project II	3
Total:	12

[1] **CORE:** Computer Science majors are required to take specific courses for Core 20, Core 30, and Core 90. For all other 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.

Identified Marketable Skills	Top Three Local Employers or Industries/Professional Programs/Possible Career Opportunities

Additional notes:

- 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.
- At least 36 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU. A maximum of six semester hours in religion (RELI) and six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

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.