#### West Texas A&M University **Advising Services Degree Checklist** 2021-2022 (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	23					
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)		1					
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)	0						
HIST 1301, 1302, 2301, 2381, 2382 Choose 2 Government/Political Science (Core 70)	6						
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)	(0)						
See University Core Requirements below COMPUTER SCIENCE—ENTERPRISE SYSTEMS TRACK	(6)						
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 +							
CCRE 20 MATH 2413*[3] Calculus I	3						
CORE 30 CHEM 1411*[3] and 1412*[3] OR	6						
PHYS 2425*[3] and 2426*[3]							
CORE 90 ENGL 2311* Introduction to Professional and Technical Communication	3						
MATH 2413[1] <b>AND</b> CHEM 1411L[1] and 1412L[1]	3						
PHYS 2425L[1] and 2426L[1]							
MAJOR REQUIREMENTS: 51 HOURS							
CS 1301 Introduction to Computer Science	3						
CS 1337, 1337L Programming Principles I	0						
OR CIDM 2315 – Programming Business Applications	3						
CS 2337*, 2337L Programming Principles II	3						
CS 2325*, 2325L Computer Organization and Assembly Language	3						
CS 3303* Object-Oriented Software Development	3						
CS 3305* Data Structures and Algorithms	3						
CS 3307* Algorithm Design and Analysis	3						

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

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CS 3310* Programming Languages	3			
CS 3340* Software Engineering <b>or</b> CIDM 4360* – Object-Oriented Analysis and Design				
CS 3350* Database Systems Use, Design &	3			
Implementation <b>or</b> CIDM 3350* Database system design				
CS 3352* Operating Systems and Networking	3			
CS 3372* Net-Centric Computing or	3			
CIDM3385* – Network Security and Data Communication	-			
CS 4325* Computer Architecture	3			
CS 4385* Concurrency and Distributed Systems	3			
CS 4360* Approaches to Internet and Computer Networks Security				
CS 4390* Senior Capstone Project I	3			
CS 4391* Senior Capstone Project II				
REQUIRED MATH COURSES: 16 HOURS				
MATH 2321* Discrete Structures I	3			
MATH 2322* Discrete Structures II				
	3			
MATH 2414* Calculus II	-			
	-			
MATH 2414* Calculus II  Take 6 hours from: MATH 3311* Linear Algebra CC MATH 3321* Probability and Finite Mathematics MATH 3325* Introduction to Proofs MATH 3340* Calculus III CC MATH 3342* Differential Equations I CC 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	4			
MATH 2414* Calculus II  Take 6 hours from: MATH 3311* Linear Algebra  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	4			
MATH 2414* Calculus II  Take 6 hours from: MATH 3311* Linear Algebra CC MATH 3321* Probability and Finite Mathematics MATH 3325* Introduction to Proofs MATH 3340* Calculus III CC MATH 3342* Differential Equations I CC 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: 12 HOURS	6			
MATH 2414* Calculus II  Take 6 hours from: MATH 3311* Linear Algebra  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: 12 HOURS CS 3321* Introduction to Enterprise Systems	6			
MATH 2414* Calculus II       CC         Take 6 hours from:       MATH 3311* Linear Algebra CC         MATH 3311* Drobability and Finite Mathematics       MATH 3325* Introduction to Proofs         MATH 3340* Calculus III CC       MATH 3342* Differential Equations I         MATH 3343* Differential Equations II       MATH 4310* Modern Algebra with Cryptography         MATH 4340* Complex Variables I       MATH 4361* Statistics for the Sciences         MATH 4362* Introduction to Numerical Analysis       ENTERPRISE SYSTEMS TRACK: 12 HOURS         CS 3321* Introduction to Enterprise Systems       CS 3322* Enterprise Systems Application Development	6			
MATH 2414* Calculus II  Take 6 hours from: MATH 3311* Linear Algebra  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 3343* Differential Equations II MATH 4310* Modern Algebra with Cryptography MATH 4340* Complex Variables I MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis ENTERPRISE SYSTEMS TRACK: 12 HOURS CS 3321* Introduction to Enterprise Systems CS 3322* Enterprise Systems Application Development CS 4321* Enterprise Systems Assembler Programming	4 6 3 3 3 3			

• 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. 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 2021-2022 Curriculum Guide

Major: Computer Science - Enterprise Systems Track

Major Code: 307

First Year		Second Year	
Fall	Spring	Fall	Spring
Semester Hours	Semester Hours	Semester Hours	Semester Hours
Third Year		Fourth Year	
	Spring		Spring
	Spring	Fourth Year	
	Spring	Fourth Year	
Third Year Fall	Spring	Fourth Year	
	Spring Semester Hours	Fourth Year	

## Degree Total Hours 120

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: