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

rpc 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.

NAME:	WT ID:	DATE:	

Computer Science—Enterprise Systems Track Engineering and Computer Science ECS Building, Room 119 651-5257

Communication (10)	CORE CURRICULUM COURSES: 42 HOURS +	HRS	FPC				
Argumentation	Communication (10)						
Mathematics (20) (4)	1	3					
Computer Science Computer Science Computer Science Computer Science Computer Science Computer Science Computer Computer Science Computer Science Computer Science Computer Computer Science Computer Computer Science Computer Science	COMM 1315, 1318, or 1321**	3					
Life and Physical Sciences (30) (6)	Mathematics (20)						
See University Core Requirements below	See University Core Requirements below	(4)					
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 Creative Arts (50) ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 Choose 1 American History (60) HIST 1301, 1302, 2301, 2381 Choose 2 6 Government/Political Science (70) POSC 2305 and 2306 6 6 Social and Behavioral Sciences (80) AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 Component Area Option (90) See University Core Requirements below (6) COMPUTER SCIENCE—ENTERPRISE SYSTEMS TRACK REQUIREMENTS: 94 HOURS * A grade of "C" or better immandatory for all prerequisites listed for ECS courses required for Computer Science majors. * A grade of "C" or better is mandatory for all prerequisites listed for ECS courses required for Computer Science majors. * A grade of "C" or better is mandatory for all prerequisites listed for ECS courses required for Computer Science majors. * ORE 20 MATH 2413*[3] Calculus I CORE 20 MATH 2413*[3] and 1412*[3] OR PHYS 2425*[3] and 2426*[3] CORE 90 MATH 2413[1] AND CHEM 14111*[1] and 1412L[1] OR PHYS 2425L[1] and 2426L[1] MAJOR REQUIREMENTS: 45 HOURS CS 1301 Introduction to Computer Science CS 1337, 1337L Introduction to Object-Oriented Programming CS 2325*, 2325L Computer Organization and Assembly Language 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	· · · · · ·	(6)					
HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 23111, 23121/***, 23131*, 2315*, or 2371							
ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 Choose 1 American History (60) HIST 1301, 1302, 2301, 2381 Choose 2 Government/Political Science (70) POSC 2305 and 2306 6 6 Social and Behavioral Sciences (80) AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 Component Area Option (90) See University Core Requirements below (6) COMPUTER SCIENCE—ENTERPRISE SYSTEMS TRACK REQUIREMENTS: 94 HOURS * 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 CHEM 1411*[3] and 1412*[3] FPC OR MATH 2413*[3] Calculus I FPC OR PHYS 2425*[3] and 2426*[3] FPC OR E 20 ENGL 2311* Introduction to Professional and Technical FPC Communication CORE 90 MATH 2413[1] AND CHEM 1411*[1] and 1412L[1] AND CHEM 1411*[3] Calculus I GORE 30 CS 1337, 1337L Introduction to Computer Science 3 CS 1337, 1337L Introduction to Object-Oriented Programming CS 2325*, 2325L Computer Organization and Assembly Language 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	HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/***, 2313*, 2315*, or 2371	3					
1307, MUSI 1310; or THRE 1310	`						
HIST 1301, 1302, 2301, 2381	1307, MUSI 1310; or THRE 1310 Choose 1	3					
POSC 2305 and 2306 6	American History (60)						
POSC 2305 and 2306 Social and Behavioral Sciences (80)		6					
Social and Behavioral Sciences (80)	` ′						
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 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 FPC GORE 30 CHEM 1411*[3] and 1412*[3] OR PHY'S 2425*[3] and 2426*[3] CORE 90 ENGL 2311* Introduction to Professional and Technical PPC Communication CORE 90 ENGL 2311* JAND CHEM 1411L[1] and 1412L[1] OR PHY'S 2425L[1] and 2426L[1] MAJOR REQUIREMENTS: 45 HOURS CS 1301 Introduction to Computer Science S 1337, 1337L Introduction to Object-Oriented Programming CS 2325*, 2325L Computer Organization and Assembly Language CS 2336*, 2336L Objects and Data Abstraction CS 3305* Data Structures and Algorithms CS 3307* Algorithm Design and Analysis CS 3310* Programming Languages 3	POSC 2305 and 2306	6					
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MATH 2413*[3] Calculus							
CHEM 1411*[3] and 1412*[3] OR PHYS 2425*[3] and 2426*[3] CORE 90 ENGL 2311* Introduction to Professional and Technical FPC Communication CORE 90 MATH 2413[1] AND CHEM 1411L[1] and 1412L[1] OR PHYS 2425L[1] and 2426L[1] MAJOR REQUIREMENTS: 45 HOURS CS 1301 Introduction to Computer Science CS 1337, 1337L Introduction to Object-Oriented Programming CS 2325*, 2325L Computer Organization and Assembly Language CS 2336*, 2336L Objects and Data Abstraction CS 3305* Data Structures and Algorithms CS 3307* Algorithm Design and Analysis CS 3310* Programming Languages 6 PPC 6 PPC 6 8 CS 3805* Data Structures and Algorithms CS 3307* Programming Languages 3 CS 3310* Programming Languages	MATH 2413*[3] Calculus I	3					
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ENGL 2311* Introduction to Professional and Technical FPC Communication CORE 90 MATH 2413[1] AND CHEM 1411L[1] and 1412L[1] PHYS 2425L[1] and 2426L[1] MAJOR REQUIREMENTS: 45 HOURS CS 1301 Introduction to Computer Science 3 CS 1337, 1337L Introduction to Object-Oriented Programming CS 2325*, 2325L Computer Organization and Assembly Language 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							
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CS 1301 Introduction to Computer Science CS 1337, 1337L Introduction to Object-Oriented Programming CS 2325*, 2325L Computer Organization and Assembly Language CS 2336*, 2336L Objects and Data Abstraction CS 3305* Data Structures and Algorithms CS 3307* Algorithm Design and Analysis CS 3310* Programming Languages 3 3 3 3 3 3 3 3 3 3 3 3 3							
CS 1337, 1337L Introduction to Object-Oriented Programming CS 2325*, 2325L Computer Organization and Assembly Language CS 2336*, 2336L Objects and Data Abstraction CS 3305* Data Structures and Algorithms 3 CS 3307* Algorithm Design and Analysis CS 3310* Programming Languages 3	MAJOR REQUIREMENTS: 45 HOURS						
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 1301 Introduction to Computer Science	3					
Language CS 2336*, 2336L Objects and Data Abstraction CS 3305* Data Structures and Algorithms CS 3307* Algorithm Design and Analysis CS 3310* Programming Languages 3 CS 3310* Programming Languages		3					
CS 3305* Data Structures and Algorithms 3 CS 3307* Algorithm Design and Analysis 3 CS 3310* Programming Languages 3		3					
CS 3307* Algorithm Design and Analysis 3 CS 3310* Programming Languages 3	CS 2336*, 2336L Objects and Data Abstraction	3					
CS 3310* Programming Languages 3	CS 3305* Data Structures and Algorithms	3					
	CS 3307* Algorithm Design and Analysis	3					
CS 3315* Scripting Languages 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			
CS 4325* Computer Architecture			
CS 4340* Database Systems Use, Design and Implementation			
CS 4385* Concurrency and Distributed Systems			
CS 4390* Software Development & Systems Prog.			
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 FPC	4		
Take 6 hours from: MATH 3311* Linear Algebra MATH 3321* Probability and Finite Mathematics MATH 3325* Introduction to Proofs MATH 3340* Calculus III FPC 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	6		
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	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			

[♦] 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.

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.