

**West Texas A&M University**  
**Advising Services**  
**Degree Checklist**  
**2018-2019**

(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**

<b>CORE CURRICULUM COURSES: 42 HOURS ♦</b>		<b>HRS</b>
<b>Communication (Code 10)</b>		
ENGL 1301 Introduction to Academic Writing and Argumentation	3	
COMM 1315, 1318, or 1321**	3	
<b>Mathematics (Code 20)</b>		
See University Core Requirements below	(4)	
<b>Life and Physical Sciences (Code 30)</b>		
See University Core Requirements below	(6)	
<b>Language, Philosophy and Culture (40)</b>		
ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371 <b>Choose 1</b>	3	
<b>Creative Arts (Code 50)</b>		
ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 <b>Choose 1</b>	3	
<b>American History (Code 60)</b>		
HIST 1301, 1302, 2301, 2381 <b>Choose 2</b>	6	
<b>Government/Political Science (Code 70)</b>		
POSC 2305 and 2306	6	
<b>Social and Behavioral Sciences (Code 80)</b>		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 <b>Choose 1</b>	3	
<b>Component Area Option (Code 90)</b>		
See University Core Requirements below	(6)	
<b>COMPUTER SCIENCE—ENTERPRISE SYSTEMS TRACK REQUIREMENTS: 94 HOURS</b>		
♦ 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.		
<b>UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦</b>		
<b>CORE 20</b>		
MATH 2413*[3] Calculus I	3	
<b>CORE 30</b>		
CHEM 1411*[3] and 1412*[3] OR PHYS 2425*[3] and 2426*[3]	6	
<b>CORE 90</b>		
ENGL 2311* Introduction to Professional and Technical Communication	3	
<b>CORE 90</b>		
MATH 2413[1] AND CHEM 1411L[1] and 1412L[1] OR PHYS 2425L[1] and 2426L[1]	3	
<b>MAJOR REQUIREMENTS: 45 HOURS</b>		
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	
<b>REQUIRED MATH COURSES: 16 HOURS</b>		
MATH 2321* Discrete Structures I	3	
MATH 2322* Discrete Structures II	3	
MATH 2414* Calculus II	4	
<b>Take 6 hours from:</b>		
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		
<b>ENTERPRISE SYSTEMS TRACK: 18 HOURS</b>		
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	
<b>TOTAL HOURS REQUIRED TO COMPLETE DEGREE</b>	<b>121</b>	

♦ 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.**

# B.S. Computer Science - Enterprise Systems Track

## Course Map

