

**West Texas A&M University**  
**STARR Center**  
**Degree Checklist**  
**2008-2009**

NAME: \_\_\_\_\_ WT ID: \_\_\_\_\_ DATE: \_\_\_\_\_

**Computer Science**  
**Department of Engineering and Computer Science**  
**ECS 120 651-5257**

CORE CURRICULUM COURSES: 28 HOURS ♦ Number of hours does not include specific core requirements listed below.	HRS	
<b>Communication (10)</b>		
ENGL 1301 (ENG 101)	3	
See University Core Requirements below	(3)	
<b>Communication (11)</b>		
SCOM 1315 (101), 1318 (103), or 1321** (201)	3	
<b>Mathematics (20)</b>		
See University Core Requirements below	(4)	
<b>Natural Sciences (30)</b>		
See University Core Requirements below	(8)	
<b>Humanities (40-41)</b>		
ENGL 2321* (NEW), 2326* (NEW), 2331* (NEW), 2341* (NEW), 2343* (NEW); HIST 2311 (110), 2372 (210); MCOM 1307 (MC 107); PHIL 1301 (101), 2374 (204); or SPAN 2312*/*** (207) Choose 1	3	
<b>Visual and Performing Arts (50)</b>		
HUMA 1315 (FA 101); ARTS 1303 (ART 151), ARTS 1304 (ART 152); DANC 2303 (NEW); MUSI 1306 (MUS 101) or 1208 and 1209; or THRE 1310 (105) Choose 1	3	
<b>Social and Behavioral Sciences (60)</b>		
HIST 1301 (201), 1302 (202), 2301 Choose 2	6	
<b>Social and Behavioral Sciences (70)</b>		
POSC 2305 (101) or POSC 2370 (NEW); 2306 (102)	6	
<b>Social and Behavioral Sciences (80)</b>		
AGBE 2317 (213), ANTH 2351 (201); CRIJ 1301 (CJ 105); ECON 2301 (ECO 201), 2302 (ECO 202), 2371; GEOG 1302 (202); PSYC 2301 (PSY 201); SCOM 2377 (255); SOCI 1301 (201); or SOCW 2361 (SOWK 201) Choose 1	3	
<b>Institutionally Designated Option (90)</b>		
PHED 1111 (SES 101); PHED/ANSC activity course; DANC 1241 (1070), 2241* (2370); MUEN 1026 Upon written recommendation of the University physician or the coordinator for Student Disability Services, students may substitute a one hour elective course in lieu of physical education course.	1-2	
<b>COMPUTER SCIENCE REQUIREMENTS: 94 HOURS</b> Courses required for a degree in Computer Science.		
<b>UNIVERSITY CORE REQUIREMENTS: 15 HOURS</b>		
<b>CORE 10</b> 2311* (ENG 270) Technical Communication	3	
<b>CORE 20</b> MATH 2413* (240) Calculus I	4	
<b>CORE 30</b> CHEM 1411*, 1411L (101,101L) and 1412*, 1412L (102, 102L) or PHYS 2425*, 2425L (210) and 2426*, 2426L (211)	8	
<b>MAJOR REQUIREMENTS: 51 HOURS</b>		
CS 1301 (NEW) Introduction to Computer Science	3	
CS 1437, 1437L (NEW) Introduction to Object-Oriented Programming	4	
CS 2425*, 2425L (NEW) Computer Organization and Assembly Language	4	
CS 2436*, 2436L (NEW) Objects and Data Abstraction	4	
CS 3305* (290, 2377) Data Structures and Algorithms	3	
CS 3307* (307) Algorithm Design and Analysis	3	

**Bachelor of Science Degree**  
**BS.CS (307)**

CS 3310* (NEW) Programming Languages	3		
CS 3315* (315) Scripting Languages	3		
CS 3352* (NEW) Operating Systems and Networking	3		
CS 3372* (NEW) Net-Centric Computing	3		
CS 4310* (NEW) Programming Language Translation	3		
CS 4325* (425) Computer Architecture	3		
CS 4340* (NEW) Database Systems	3		
CS 4385* (485) Concurrency and Distributed Systems	3		
CS 4390* (NEW) Software Development & Systems Prog.	3		
CS 4391* (NEW) Software Development & Prof. Practice	3		
<b>COMPUTER SCIENCE ADVANCED ELECTIVES (6 HOURS)</b>			
<b>Take 6 hours from (must have advisor approval for selection):</b>			
CS 3303* Object-Oriented Software Development	6		
CS 3387* (NEW) Artificial Intelligence			
CS 4097* (NEW) Computer Science Research			
CS 4098* (NEW) Internship in Computer Science			
CS 4330* (430) Computer Graphics			
CS 4350* (NEW) Automata and Language Theory			
CS 4360* Approaches to Internet and Computer Networks Security			
CS 4392* (NEW) Special Topics in Computer Science			
CS 4398* Internship in Computer Science			
<b>REQUIRED COURSES FROM OTHER DISCIPLINES (10 HOURS)</b>			
MATH 2321* (NEW) Discrete Structures I		3	
MATH 2322* (NEW) Discrete Structures II	3		
MATH 2414* (241) Calculus II	4		
<b>REQUIRED COURSES FROM MATH (6 HOURS)</b>			
<b>Take 6 hours from:</b>			
MATH 3311* (411) Linear Algebra	6		
MATH 3321* (321) Probability and Finite Mathematics			
MATH 3340* (340) Calculus III			
MATH 3342* (342) Differential Equations I			
MATH 3343* Differential Equations II			
MATH 4310* (310) Modern Algebra			
MATH 4340* (440) Complex Variables I			
MATH 4341* (441) Advanced Calculus			
MATH 4361* (461) Engineering Statistics			
MATH 4362* (492) Introduction to Numerical Analysis			
<b>ELECTIVES (6 HOURS BY ADVISEMENT)****</b>			
ELECTIVES FROM ENGINEERING, ENGINEERING TECHNOLOGY, MATH OR PHYSICS	6		
<b>TOTAL HOURS REQUIRED TO COMPLETE DEGREE</b>			
	122		

♦ Core curriculum courses should be taken during the first two years of enrollment. For a list of core courses with descriptions see [www.wtamu.edu/start/](http://www.wtamu.edu/start/).  
\* Indicates prerequisites—see [catalog](#) for more information.  
\*\* Recommended.  
\*\*\* Or an equivalent course (second year, second semester) in French or German.  
\*\*\*\* At least 36 hours of advanced work (courses at the 3000- or 4000-level) are required to receive a bachelor's degree. At least 30 must be earned in residence at WTAMU.

**Note: This is NOT a degree plan. Upon completion of 60 hours, apply for a degree plan in the office of the dean of the College of Agriculture, Science and Engineering located in the Agriculture and Natural Sciences Building, Room 106, or call 651-2585.**