

West Texas A&M University
STARR Center
Degree Checklist
2007-2008

NAME: _____ WT ID: _____ DATE: _____

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

CORE CURRICULUM COURSES (43 HOURS)	HRS
ENGL 1301 (ENG 101) Composition and Reading	3
ENGL 1302* (ENG 102) Composition and Reading	3
SCOM 1315 (101), 1318 (103), or 1321** (201) (SPEECH COMMUNICATION)	3
MATH 2413* (240) Calculus I	4
CHEM 1411*, 1411L (101,101L) and 1412*, 1412L (102, 102L) or PHYS 2425*, 2425L (210) and 2426*, 2426L (211)	8
ENGL 2332* (ENG 201), 2333* (202), 2371* (203); HIST 2372 (210); PHIL 1301 (101); or SPAN 2312*/**** (207) (ENGLISH, HISTORY, PHILOSOPHY, SPANISH) Choose 1	3
HUMA 1315 (FA 101); ARTS 1303 (ART 151), ARTS 1304 (ART 152); MUSI 1306 (MUS 101) or 1208 and 1209; or THRE 1310 (THRE 105) (HUMANITIES, ART, MUSIC, THEATRE) Choose 1	3
HIST 1301 (201) America, 1492-1877	3
HIST 1302 (202) America Since 1877	3
POSC 2305 (101) American National Government POSC 2370 (NEW) Constitutional American Government Choose 1	3
POSC 2306 (102) American State and Local Government	3
AGBE 2317 (213), ANTH 2351 (201), ECON 2301 (ECO 201), GEOG 1302 (202), PSYC 2301 (PSY 201), SCOM 2377 (255), SOCI 1301 (201) (AGRICULTURAL BUSINESS AND ECONOMICS, ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, PSYCHOLOGY, SPEECH COMMUNICATION, SOCIOLOGY) Choose 1	3
PHED 1111 (SES 101) (PHYSICAL EDUCATION) 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
COMPUTER SCIENCE MAJOR REQUIREMENTS (48 HOURS)	
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 2377* (290) Data Structures and Algorithms	3
CS 3307* (307) Algorithm Design and Analysis	3
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 4385* (485) Concurrency and Distributed Systems	3
CS 4390* (NEW) Software Development and Systems Programming	3

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CS 4391* (NEW) Software Development and Professional Practice	3	
COMPUTER SCIENCE AND COMPUTER INFORMATION SYSTEMS ADVANCED ELECTIVES (6 HOURS)		
Take 6 hours from (must have advisor approval for selection):		
CS 3303* Object-Oriented Software Development 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 CIS 3350* (450) Database Systems Design CIS 3372 Web Application Development CIS 4350* (NEW) Data Warehousing and Data Mining CIS 4372 (314) Information Visualization and User Interface Design CIS 4382* (482) Software Development in a Database Design CS 4398* Internship in Computer Science	6	
REQUIRED COURSES FROM OTHER DISCIPLINES (13 HOURS)		
ENGR 1302* Fundamentals of Engineering II	3	
MATH 2321* (NEW) Discrete Structures I	3	
MATH 2322* (NEW) Discrete Structures II	3	
MATH 2414* (241) Calculus II	4	
REQUIRED COURSES FROM MATH (6 HOURS)		
Take 6 hours from:		
MATH 3311* (411) Linear Algebra MATH 3321* (321) Probability and Finite Mathematics MATH 3340* (340) Calculus III MATH 3342* (342) Differential Equations 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	6	
ELECTIVES (6 HOURS BY ADVISEMENT)****		
ELECTIVES FROM ENGINEERING, ENGINEERING TECHNOLOGY, MATH OR PHYSICS	6	
TOTAL HOURS REQUIRED TO COMPLETE DEGREE	122	

* 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.

Revised 5/07
cs.bs

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 Old Main, Room 402, or call 651-2585.