2015-2016 BS Computer Engineering Degree Plan

Last First Middle SMU Student ID

See University Curriculum requirements in the Undergraduate Catalog.

MAJOR

Courses	Hours	Semester & Year	Grade
CSE 1341 – Principles of Computer Science I	3		
CSE 1342 – Programming Concepts	3		
CSE 2240 – Assembly Language Programming & Machine Organization	2		
CSE 2341 – Data Structures	3		
CSE 3353 – Fundamentals of Algorithms	3		
CSE 3339 – Information Assurance and Security	3		
CSE 3381 – Digital Logic Design	3		
CSE 4344 – Computer Networks and Distributed Systems	3		
CSE 4351 – Senior Design I	3		
CSE 4352 – Senior Design II	3		
CSE 4381 – Digital Computer Design	3		
CSE 5343 – Operating Systems & System Software	3		
CSE 5387 – Digital System Design	3		
EE 2122 – EE Laboratory: Electronic Circuits I	1		
EE 2322 – Electronic Circuits I	3		
EE 2350 – Circuit Analysis I	3		
EE 2370 – Design and Analysis of Signals and Systems	3		_
EE 2170 – EE Laboratory: Design and Analysis of Signals and Systems	1		
TOTAL	49		

MAJOR TRACKS

MAJOR TRACKS			
Courses	Hours	Semester & Year	Grade
Hardware Track	9		
HWME ¹	3		
HWME ¹	3		
HWME ¹	3		
Software Track	9		
CSE 3345 – Graphical User Interface Design and Implementation	3		
CSE 4345 – Software Engineering Principles	3		
SWME ²	3		
Networking Track	9		
NME ³	3		
NME ³	3		
NME ³	3		
Security Track	9		
CSE 5339 – Computer System Security	3		
CSE 5349 – Data and Network Security	3		
Security Track Elective ⁴	3		
General Track	9		
AME ⁴	3		
AME ⁴	3		
AME ⁴	3		

SCHOOL OF ENGINEERING ADVANCED ELECTIVES (4000 Level or above, as approved by advisor)

Courses	Hour	Semester & Year	Grade
AME ⁵	3		
AME ⁵	3		

TOTAL	6	

ENGINEERING LEADERSHIP

Courses	Hours	Semester & Year	Grade
CSE 4360 – Technical Entrepreneurship	3		
EMIS 3308 – Engineering Management or CSE 5317 – Leadership for Architecting Software Systems or CEE 3302 – Engineering Communications	3		
TOTAL	6		

MATHEMATICS & STATISTICS

Courses	Hours	Semester & Year	Grade
MATH 1337 – Calculus with Analytic Geometry I	3		
MATH 1338 – Calculus with Analytic Geometry II	3		
CSE 2353 – Discrete Computational Structures	3		
MATH 2343 – Elementary Differential Equations	3		
MATH 3353 – Introduction to Linear Algebra	3		
MATH 3315 or CSE 3365 – Introduction to Scientific Computing or MATH 3316 -	3		
Introduction to High-Performance Scientific Computing	U		
STAT 4340/5340, CSE 4340 or EMIS 3340 – Statistical Methods for Engineers & Scientists	3		
TOTAL	21		

SCIENCE

Courses	Hours	Semester & Year	Grade
PHYS 1303 – Introductory Mechanics	3		
PHYS 1304 – Introductory Electricity & Magnetism	3		
PHYS 1106 – General Physics Laboratory	1		
CHEM 1303 – General Chemistry	3		
Science Elective ⁵	3		
TOTAL	13		

White Degree Plan (For advising ONLY!)

Blue Degree Plan (For graduating seniors ONLY: Due at the beginning of the graduating semester.)

GRADUATION CERTIFICATION:

Advisor	Date
Dept. Chair or Associate Chair	Date
Assistant Dean	Date

¹To be chosen from CSE 5380, CSE 5381, CSE/EE 5385, and CSE/EE 5356

²To be chosen from CSE 5314, CSE 5316, and CSE 5319

³To be chosen from CSE 5344, CSE 5348, CSE 5349, and EE 5376

⁴Major Elective is any 3-hour CSE course numbered 4000 or above as approved by the adviser

⁵To be chosen from ANTH 2315, ANTH 2363, BIOL 1401, BIOL 1402, CHEM 1304/1114, GEOL 1301, GEOL 1305, GEOL 1307, GEOL 1308, GEOL 1313, GEOL 1315 and PHYS 3305