SMU | BOBBY B. LYLE SCHOOL OF ENGINEERING

2016-2017 BS Computer Science 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 3342 – Programming Languages	3		
CSE 3345 – Graphical User Interface Design and Implementation	3		
CSE 3353 – Fundamentals of Algorithms	3		
CSE 3330 – Database Concepts	3		
CSE 3339 - Information Assurance and Security	3		
CSE 3381 – Digital Logic Design	3		
CSE 4344 – Computer Networks and Distributed Systems	3		
CSE 4345 – Software Engineering Principles	3		
CSE 4351 – Senior Design I[3]	3		
CSE 4352 – Senior Design II[3]	3		
CSE 4381 – Digital Computer Design	3		
CSE 5343 – Operating Systems & System Software	3		
TOTAL	47/41[4]		

MAJOR TRACKS

Courses	Hours	Semester & Year	Grade
Research Track	**9**		
CSE 5350 – Algorithm Engineering	3		
CSE 4397 – Research Experience for Undergraduates	3		
Research Track Elective[1]	3		
Security Track	**9**		
CSE 5339 – Computer System Security	3		
CSE 5349 – Data and Network Security	3		
Security Track Elective[1]	3		
Data-Intensive Computing Track	**9**		
CSE 5330 – File Organization and Database Management	3		
CSE 5331 – An Introduction to Data Mining and Related Topics	3		
Data-Intensive Computing Track Elective[1]	3		
Software Engineering Track	**9**		
CSE 5314 – Software Testing and Quality Assurance	**3**		
CSE 5319 – Software Architecture and Design	**3**		
Software Engineering Track Elective[1]	**3**		
General Track	**9**		
AME[1]	3		
AME[1]	3		
AME[1]	3		
Game Development Track[3]	**16**		
HGAM 5201 - Game Study I	2		
HGAM 5202 - Game Study II	2		
HGAM 5311 - Software Development for Games I[3]	3		
HGAM 5312 - Software Development for Games II[3]	3		
HGAM 5221 - Mathematical Methods of Game Physics I	2		
HGAM 5222 - Mathematical Methods of Game Physics II	2		
HGAM 5200 Game Design I	2		
CSE 4051 – Gaming Project Design	0		
TOTAL	**9/16[4]**		

Advanced Major Electives[1]

Courses	Hours	Semester & Year	Grade
AME	3		
AME	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 3315 or CSE 3365 – Introduction to Scientific Computing or MATH 3316 - Introduction to High-Performance Scientific Computing	3		
MATH 3353 – Introduction to Linear Algebra	3		
CSE 4340, STAT 4340/5340 or EMIS 3340 – Statistical Methods for Engineers & Scientists	3		
TOTAL	18		

SCIENCE

Courses	Hours	Semester & Year	Grade
PHYS 1303 – Introductory Mechanics	3		
PHYS 1304 – Introductory Electricity & Magnetism	3		
PHYS 1105 – General Physics Laboratory I	1		
PHYS 1106 – General Physics Laboratory II	1		
Science Elective[2]	3		
Science Elective[2]	3		
TOTAL	14		

LEADERSHIP/BROADENING COURSES

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		

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**

[1]Major Elective is any 3-hour CSE course numbered 4000 or above as approved by the adviser.
[2]To be chosen from ANTH 2315, ANTH 2363, BIOL 1401, BIOL 1402, CHEM 1113, CHEM 1114, CHEM 1303, CHEM 1304, GEOL 1301, GEOL 1305, GEOL 1307, GEOL 1308, GEOL 1313, GEOL 1315 and PHYS 3305
[3]Senior Design Project (CSE 4351 and 4352) for Game Track students is satisfied by HGAM 5311 and HGAM 5312