COMPUTER SCIENCE - GENERAL EMPHASIS REQUIREMENTS (BA/BS)

Code	Title	Units
Major Requirements [1]		
Software Development Fundamentals:		
COMPSCI 172	INTRODUCTION TO JAVA	3
or COMPSCI 174	INTRODUCTION TO C++	
COMPSCI 220	INTERMEDIATE JAVA	3
or COMPSCI 222	INTERMEDIATE C++	
COMPSCI 223	DATA STRUCTURES	3
Core Courses:		
COMPSCI 271	COMPUTER ORGANIZATION AND ASSEMBLY PROGRAMMING	3
COMPSCI 366	DATABASE MANAGEMENT SYSTEMS	3
COMPSCI 412	EMBEDDED SYSTEMS	3
COMPSCI 433	THEORY OF ALGORITHMS	3
COMPSCI 476	SOFTWARE ENGINEERING	3
Electives: [2]		12
Any COMPSCI courses numbered 300 or above (no limit)		
Up to 6 total units in this category may come from the following courses:		
MATH 355	MATRICES AND LINEAR ALGEBRA	
MATH 450	GRAPH THEORY	
MATH 471	NUMERICAL ANALYSIS	
STAT 342	APPLIED STATISTICS	
Total Units		**36**

[1] An approved minor is required for this major.

[2] Students pursuing a BSE degree with a second major in Computer Science may also select SECNDED 442 as a technical elective, with Computer Science department consent. Students seeking licensure to teach computer science are required to take this course.

Code	Title	Units
Unique Requirements		
MATH 250	APPLIED CALCULUS SURVEY FOR BUSINESS AND SOCIAL SCIENCES	5
or MATH 253	CALCULUS AND ANALYTIC GEOMETRY I	
COMPSCI 215	DISCRETE STRUCTURES	3
or MATH 280	DISCRETE MATHEMATICS	
ENGLISH 370	ADVANCED COMPOSITION	3
or PWP 371	WRITING IN THE SCIENCES	
or PWP 372	TECHNICAL AND PROFESSIONAL WRITING	