

# Computer Science - Scientific Concentration

## Bachelor of Science

NAME:

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Grade Semester			Minimum Grade of "D" Required:	Grade Semester			Minimum Grade of "C" Required:
ENGLISH (12 hrs)			ENGL 101 Freshman Composition (3 hrs)			MATH 200 Calculus I (5 hrs)	MATH (19 hrs)
			ENGL 102 Critical Reading and Writing (3 hrs)			MATH 201 Calculus II (5 hrs)	
			ENGL 230, 231 <u>or</u> 232 (3 hrs)			MATH 380 <sup>1</sup> Applied Statistics with Probability (3 hrs)	
			ENGL 322 Intro to Prof and Technical Writing (3 hrs)			MATH Elective <sup>1</sup> (3 hrs)	
NATURAL SCIENCE (15 hrs)			Science Sequence 1 Lecture (3 hrs)			MATH Elective <sup>1</sup> (3 hrs)	COMPUTER SCIENCE (48 hrs)
			Science Sequence 1 Lab (1 hrs)	Math Electives Choices: 312, 350, 360, 370, 410, or 414			
			Science Sequence II Lecture (3 hrs)	<sup>1</sup> A minimum grade of "D" is required in MATH 380 and the MATH electives			
			Science Sequence II Lab (1 hrs)			CMPS 161 Algorithm Design & Implementation I (3 hrs)	
			Science Course Lecture (3 hrs)			CMPS 257 Discrete Structures (3 hrs) (Can be substituted with MATH 223)	
			Science Course Lab (1 hr)			CMPS 280 Algorithm Design & Implementation II (3 hrs)	
			Science Course Lecture (3 hrs)			CMPS 285 Software Engineering (3 hrs)	
	Biology 151/152 must be taken. A two-course sequence of lectures/lab coursework must also be taken: either Biology 151/152 & 153/154 <u>or</u> Physics 221/223 & 222/224 <u>or</u> Chemistry 121/123 & 122/124. All science course must come from the above set of science courses.					CMPS 290 Computer Organization <u>or</u> CMPS 293 Assembly Language (3 hrs)	
ELECTIVES (9 hrs)			Free Elective (3 hrs)			CMPS 375 Computer Architecture (3 hrs)	
			Free Elective (3 hrs)			CMPS 390 Data Structures (3 hrs)	
			Free Elective (3 hrs)			CMPS 391 Numerical Methods (3 hrs)	
OTHER (17 hrs)			ART, DANCE, MUS, or THEA (3 hrs)			CMPS 401 Survey of Programming Languages (3 hrs)	
			HIST Elective (3 hrs)			CMPS 411 Capstone I (3 hrs)	
			COMM 211 Introduction to Public Speaking (3 hrs)			CMPS 415 Integrated Technologies for Enterprise Systems (3 hrs)	
			ECON 201 Macroeconomics <u>or</u> ECON 202 Microeconomics (3 hrs)			CMPS 431 Operating Systems (3 hrs)	
			Social Science (3 hrs)			CMPS 479 Automata and Formal Languages (3 hrs)	
	Social Science Choices: Anthropology, Geography, Psychology, Political Science, or Sociology.					CMPS 482 Current Trends in Computer Science (3 hrs)	
			SE 101 or Free Elective (2 hrs)			CMPS 300 - 400 Level Elective (3 hrs)	
SE 101 is not required of transfer or re-admitted Southeastern students with 30 hours or more.					CMPS 300 - 400 Level Elective (3 hrs)		

LAST UPDATED: 05/22/2013

TOTAL MAJORS HOURS: 48 TOTAL SEMESTER HOURS: 120

(NOTE: 1/2 of all major hours must be taken at Southeastern)