## **Computer Science - Scientific Concentration**

**Bachelor of Science** 

NAN	/IE:			W#			
	Grade	Semester	Minimum Grade of "D" Required:	Grade	Semester	Minimum Grade of "C" Required:	
rs)			ENGL 101 Freshman Composition (3 hrs)			MATH 200 Calculus I (5 hrs)	
(12 hi			ENGL 102 Critical Reading and Writing (3 hrs)			MATH 201 Calculus II (5 hrs)	
ENGLISH (12 hrs)			<b>ENGL 230, 231</b> <u>or</u> <b>232</b> (3 hrs)			MATH 380 <sup>1</sup> Applied Statistics with Probability (3 hrs)	MAT
Ē			ENGL 322 Intro to Prof and Technical Writing (3 hrs)			MATH Elective <sup>1</sup> (3 hrs)	MATH (19 hrs)
			Science Sequence I Lecture (3 hrs)			MATH Elective <sup>1</sup> (3 hrs)	hrs)
			Science Sequence ILab (1 hrs)	Math	Math Electives Choices: 312, 350, 360, 370, 410, or 414		
hrs)			Science Sequence II Lecture (3 hrs)		<sup>1</sup> A minimum grade of "D" is required in MATH 380 and the MATH electives		
(15			Science Sequence II Lab (1 hrs)			CMPS 161 Algorithm Design &	
E						Implementation I (3 hrs)	_
NATURAL SCIENCE (15 hrs)			Science Course Lecture (3 hrs)			<b>CMPS 257</b> Discrete Structures <b>or MATH 223</b> Foundations of Discrete Mathematics (3 hrs)	
RAL			Science Course Lab (1 hr)				- 11
D L						CMPS 280 Algorithim Design &	
AN			Science Course Lecture (3 hrs)			Implementation II (3 hrs)	- 11
	Biology 1	51/152 must h	e taken. A two-course sequence of lectures/lab coursework			CMPS 285 Software Engineering (3 hrs)	
	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 or CMPS 293 Assembly Language (3 hrs)		
	science co	ourses.				CMPS 375 Computer Architecture (3 hrs)	
ELECTIVES (9 hrs)			Free Elective (3 hrs)			CMPS 390 Data Structures (3 hrs)	S
VES			Free Elective (3 hrs)	<u> </u>		CMPS 391 Numerical Methods (3 hrs)	COMPUTER SCIENCE
Ē			Free Elective (3 hrs)			Civil 3 351 Numerical Wethous (3 ms)	FER
ELE			, , ,			CMPS 401 Survey of Programming	SCI
			ART, DANCE, MUS, or THEA (3 hrs)			Languages (3 hrs)	EZ
			HIST Elective (3 hrs)			CMPS 411 Capstone I (3 hrs)	CE (4:
						CMPS 415 Integrated Technologies for	(48 hrs)
			COMM 211 Introduction to Public			Enterprise Systems (3 hrs)	(s.
			Speaking (3 hrs)			CMPS 431 Operating Systems (3 hrs)	_
ırs)			ECON 201 Macroecoomics or				
L7 h			ECON 202 Microeconomics (3 hrs)			CMPS 479 Automata and Formal	
R (J			Social Science (3 hrs)			Languages (3 hrs)	
OTHER (17 hrs)						CMPS 482 Current Trends in Computer	
0	Social Science Choices: Anthropology, Geography, Psychology, Political Science, or Sociology.				Science (3 hrs)		
					CMPS 300 - 400 Level Elective (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.						

LAST UPDATED: 03/22/2014

TOTAL MAJORS HOURS: <u>48</u> TOTAL SEMESTER HOURS: <u>120</u>

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