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**PROGRESS TOWARD COMPLETION OF MAJOR
 B.S. with concentration in Computer Science ('06-'08 catalog)**

This B.S. concentration prepares students for computer industry employment and graduate schools in computer-science-related fields. Students who are interested in the mathematical foundations of computer science generally opt for this major.

Required Courses

Core:	Met	Do
Math 161 – Differential and Integral Calculus I (3 units in GE)	4	_____
Math 211 – Differential and Integral Calculus II	4	_____
Math 220 – Higher Mathematics: An Introduction	3	_____
Math 261 – Multivariable Calculus	4	_____
Math 340 – Real Analysis I	4	_____

Concentration:

Math 241 – Differential Equations with Linear Algebra.....	4	_____
Math 316 – Graph Theory and Combinatorics (3 units) or		
Math 416 – Graph Theory and Combinatorics	3	_____
Math 322 – Linear Algebra	3	_____
Math 345 – Probability Theory.....	3	_____
Math 352 – Numerical Analysis.....	3	_____
CS 110 – Unix.....	1	_____
CS 115 – Programming I.....	4	_____
CS 215 – Programming II.....	3	_____
CS 315 – Data Structures.....	3	_____
CS 415 – Algorithm Analysis (3 units) or		
CS 355 – Database Management Systems Design (3 units)* or		
CS 375 – Computer Graphics (3 units)* or		
CS 454 – Theory of Computation*	3	_____

* Course may be substituted by arrangement with the math advisor.

Supporting Course:

Phys 114 – Intro to Physics (3 units in GE).....	4	_____
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Total units in computer science program 53

NOTE: Even though it is possible to complete this major with only 22 upper division units, **ALL** students are required to complete a **minimum of 40 upper division units**, including GE, the major, and electives, for graduation.