Computer Science BS Degree
Curriculum Chart
2010-2011

COMPLETE EITHER
CMPS 12A/L or CMPS 5J & CMPS 11

* CMPS 12A/L
Intro to Programming
(Accelerated)

* CMPS 5J
Intro to Prog: Java

CMPS 11
Intermediate Prog.

* MATH 19A or
20A
Calculus

MATH 19B or
20B
Calculus

COMPLETE EITHER
2 PHYS & Labs or 2 CHEM & Labs

* PHYS 6A/6L**
Intro to Physics I
Mechanics

PHYS 6B/6M**
Intro to Physics II
Waves

OR

PHYS 6C/6N**
Intro to Physics III
Electricity &
Magnetism

* CHEM 1B/1M
General Chemistry

* CHEM 1C/1N
General Chemistry

* CMPS 101
Abstract Data Type

* CMPS 102
Analysis of Algorithms

* CMPS 111
Operating Systems

* CMPS 112
Comparative Programming Languages

* CMPS 104A
Compiler Design I

* CMPS 107
Intro to Probability Theory

OR

* AMS 131
Stochastic

CMPS 130
Computational Models

CMPE 12/L
Computer Systems &
Assembly Language

CMPE 110
Computer Architecture

CMPE 112
Computer & Game
Architecture

CMPE 16
Discrete Math

* AMS 10
Engr Math Methods I
or
*MATH 21
Linear Algebra

Select 4 electives from the Theory and Practice course lists.
At most, only one elective may be substituted by an upper-division Math course from the Theory course list.

Upper Division
ELECTIVE

Upper Division
ELECTIVE

Upper Division
ELECTIVE

Upper Division
ELECTIVE

Exit Requirement - Students have three options to fulfill the Computer Science exit requirement:
1. Pass a Capstone Course (which can also fulfill an elective requirement, see ♣ on back for courses)
2. Receive a score of 600 or above on the GRE Computer Science Subject Test
3. Submit a Senior Thesis

* = Course Prerequisite  ♣ = Satisfies Exit & Elective Requirement  * = Check catalog/SoE course descriptions for additional prerequisites
See reverse side for theory and practice lists.  Shaded boxes represent foundation courses

http://ua.soe.ucsc.edu :: advising@soe.ucsc.edu :: (831) 459-5840 :: 7/06/2010
## COMPUTER SCIENCE BS

**DEGREE CURRICULUM**

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<thead>
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<th>Fall</th>
<th>Winter</th>
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### Theory List

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<tr>
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<tr>
<td>AMS 114</td>
<td>CMPE 100/L</td>
<td>CMPS 112</td>
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<tr>
<td>AMS 131</td>
<td>CMPE 110</td>
<td>CMPS 115</td>
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<td>AMS 147</td>
<td>CMPE 112</td>
<td>CMPS 116♣</td>
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<td>CMPE 107</td>
<td>CMPE 113</td>
<td>CMPS 122</td>
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<td>CMPE 108</td>
<td>CMPE 117/L</td>
<td>CMPS 128</td>
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<td>*CMPE 154</td>
<td>*CMPE 118/L</td>
<td>CMPS 129</td>
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<td>CMPE 177</td>
<td>*CMPE 121/L</td>
<td>CMPS 140</td>
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<td>CMPS 102</td>
<td>*CMPE 123A &amp; 123B</td>
<td>CMPS 146</td>
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<td>CMPS 130</td>
<td>*CMPE 125/L</td>
<td>CMPS 148</td>
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<td>CMPS 132</td>
<td>*CMPE 126/L</td>
<td>CMPS 160/L</td>
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<td>CMPS 142</td>
<td>CMPE 150/L</td>
<td>CMPS 161♣</td>
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<td>CMPS 166A</td>
<td>*CMPE 155/L</td>
<td>CMPS 164/L</td>
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<td>*EE 103</td>
<td>*CMPE 167/L</td>
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<td>*EE 153</td>
<td>CMPS 104A</td>
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<td>MATH 115</td>
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<td>CMPS 183♣</td>
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### Practice List

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*This course has pre-requisites that CS majors are not required to take in their regular course of study.

**NOTE:** Students may not receive credit for both AMS 131 and CMPE 107.

Many graduate courses can also be used to satisfy the electives; however students will need instructor and department approval.

♣ = Course Satisfies the CS Exit Requirement and an elective requirement

**STUDENT'S NAME:**

**STAFF ADVISOR:**

**FACULTY ADVISOR:**

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