

**B.S. Dual Major for Computer Science and Physics (282BS)  
For Students Entering in Fall 2008 or Spring 2009**

Revision of June 23, 2008

*This degree program requires 135 SH of credit*

The College of Computer and Information Science and the Department of Physics reserve the right to modify the curriculum described in this document or the individual courses as necessary in the future.

<b>Computer Science</b>	<b>Physics (38 SH: 9 @ 4 SH, 2 @ 1 SH)</b>
<b>41 or 42 SH: 9 @ 4 SH, 5 or 6 @ 1 SH</b>	<i>Physics Required Courses (30 SH)</i>
<i>Computer Science Required Courses (37 SH)</i>	PHY U161 Physics 1 & PHY U162 [1 SH]
CS U200 Discrete Structures & CS U201 [0 SH]	PHY U165 Physics 2 & PHY U166 [1 SH]
CS U211 Fund of Computer Science 1 & CS U212 [1 SH]	PHY U371 Electronics & PHY U372 [0 SH]
CS U213 Fund of Computer Science 2 & CS U214 [1 SH]	PHY U303 Modern Physics
CS U221 CS/IS Overview 1 [1 SH]	PHY U305 Thermodynamics & Statistical Mechanics
CS U222 CS/IS Overview 2 [1 SH]	PHY U600 Advanced Physics Laboratory 1
or	PHY U602 Electricity & Magnetism 1
CS U223 CS/IS Co-op Preparation [1 SH]	
CS U290 Logic and Computation & CS U291 [1 SH]	<i>Physics Electives (8 SH) (See Note on Capstone)</i>
CS U370 Object-Oriented Design	PHY Elective 1
CS U390 Theory of Computation	PHY Elective 2
CS U670 Software Development	<i>Physics Elective: PHY U400 or higher</i>
CS U690 Algorithms & Data	
CS U600 Senior Seminar [1 SH]	<b>Mathematics/Integrative Courses (20 SH: 5 @ 4 SH)</b>
	MTH U241 Calculus 1
<i>Computer Science Elective (4 SH) (See Note on Capstone)</i>	MTH U242 Calculus 2
CS Elective	MTH U341 Calculus 3
<i>CS elective: CS U380 or higher, or IS U535 or IS U570</i>	MTH U345 Ordinary Differential Equations
	MTH U525 Applied Analysis
<b>English (8 SH: 2 @ 4 SH)</b>	<i>Note on Capstone:</i>
ENG U111 College Writing	<i>Either the CS Elective or one PHY Elective must satisfy the university Capstone Requirement.</i>
ENG U302 Adv Writing in the Technical Professions	
<i>With permission, may substitute ENG U301 for ENG U302</i>	
<b>General Requirements (4 SH: 1 @ 4 SH)</b>	
SOC U528 Computers and Society	
<b>General Electives (24 SH: 6 @ 4 SH)</b>	
Elective 1: Arts/Humanities Core	
Elective 2: Social Sciences Core	
Elective 3	
Elective 4	
Elective 5	
Elective 6	
<i>The general electives must be consistent with the policy on general electives articulated by the College of Computer and Information Science on the college web site.</i>	
<i>2 of the general electives must be used to satisfy:</i>	
<i>Level 1 Arts/Humanities Core</i>	
<i>Level 1 Social Sciences Core</i>	
<i>The Comparative Cultures Requirement must be satisfied. If this is done by taking a course then this must also be one of the general electives.</i>	