

B.S. Dual Major for Computer Science and Mathematics

Revision of June 23, 2008

This degree program requires 133 SH of credit and students must be in Division A

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

Computer Science (41 SH: 9 @ 4 SH, 5 @ 1 SH)	Mathematics (41 SH: 10 @ 4 SH, 1 @ 1 SH)
<i>Computer Science Required Courses (33 SH)</i>	<i>Mathematics Required Courses (34 SH)</i>
CS U200 Discrete Structures & CS U201 (0 SH)	MTH U241 Calculus 1
CS U211 Fund of Computer Science 1 & CS U212 (1 SH)	MTH U242 Calculus 2
CS U213 Fund of Computer Science 2 & CS U214 (1 SH)	MTH U341 Calculus 3
CS U221 CS/IS Overview 1 (1 SH)	MTH U430 Number Theory
CS U222 CS/IS Overview 2 (1 SH)	MTH U345 Ordinary Differential Equations
CS U370 Object-Oriented Design	MTH U371 Linear Algebra
CS U390 Theory of Computation	MTH U481 Probability & Statistics
CS U670 Software Development	MTH U575 Group Theory
CS U690 Algorithms & Data	MTH U300 Coop Reflection Seminar 1 (1 SH)
CS U600 Senior Seminar (1 SH)	
	<i>Mathematics Elective Courses (8 SH)</i>
<i>Computer Science Elective Courses (8 SH)</i>	MTH Uxxx Elective
CS Elective 1	MTH Uxxx Elective
CS Elective 2	<i>Math Elective: MTH U401 or higher</i>
<i>CS elective: CS U380 or higher, or IS U535 or IS U570</i>	
	Integrative Courses (4 SH: 1 @ 4 SH)
English (8 SH: 2 @ 4 SH)	<i>Choose one of the following options:</i>
ENG U111 College Writing	CS U540 Computer Graphics
ENG U302 Adv Writing in the Technical Professions	CS G252 Cryptography
<i>With permission, may substitute ENG U301 for ENG U302</i>	
	<i>See also CS U200 Discrete Structures</i>
A&S Core Requirements (20 SH: 5 @ 4 SH)	<i>See also PHL U215 Symbolic Logic</i>
Category II: Methods of Inquiry	<i>See also MTH U430 Number Theory</i>
<i>Choose PHL U215 Symbolic Logic</i>	
<i>Choose one from Arts, Humanities, or Social World</i>	
Category III: Diversity	
<i>Choose one</i>	
Category IV: Historical, Ethical, Aesthetic	
<i>Choose one</i>	
Category V: Analysis	
<i>Choose SOC U528 Computers and Society</i>	
<i>Students may not fulfill any Core Requirements by taking courses in science or mathematics.</i>	
General Electives (20 SH: 5 @ 4 SH)	
Elective 1	
Elective 2	
Elective 3	
Elective 4	
Elective 5	
<i>The Core curriculum courses and general electives must be consistent with the policy on general electives articulated by the College of Computer and Information Science in the Student Guidebook and on the college web site.</i>	