Requirements for Bachelor of Science Degree in Computer and Information Technology with Computer Science (CS) Emphasis

Effective July 2011
Page 1   of 1

DIXIE STATE
COLLEGE OF UTAH

General Education Requirements: Students must complete the DSC requirements for General Education or equivalent.

CS Emphasis Requirements	Credits	Prerequisites and notes
• CS 1400, Fundamentals of Programming	3	
• CS 1410, Object-Oriented Programming	3	CS 1400
• CS 2420, Intro to Algorithms and Data Structures	3	CS 1410
• CS 2450, Software Engineering	3	CS 2420
• CS 2810, Computer Organization and Architecture	3	CS 1410
• CS 3005, Programming in C++	2	CS 1410
• CS 3310, Discrete Math	3	CS 1410 and MATH 1210
• CS 3400, Operating Systems or	3	CS 2420 and CS 2810, or
CS 3410, Distributed Systems	3	CS 2420, CS 2810 and IT 2400
• CS 3510, Advanced Algorithms/Data Structures	3	CS 2420, CS 2810 and CS 3310
• CS 3520, Programming Language	3	CS 2420 and CS 2810
• CS 3530, Computational Theory	3	CS 2420, CS 2810 and CS 3310
• CS 3600, Graphics Programming	3	CS 2420 and CS 2810
• CS 4300, Artificial Intelligence	3	CS 2420 and CS 2810
• CS 4550, Compilers	3	CS 2420 and CS 2810
• CS 4600, Senior Project	3	Senior Status
• IT 1100, Introduction to Operating Systems	3	
• IT 2400, Introduction to Networking	3	IT 1100
• IT 4300, Database Design and Management	3	CS 1400 and IT 1100
• MATH 1210, Calculus I	5	MATH 1050 and MATH 1060, or MATH 1065.
• VT 1400, Intro. to Internet Development	3	
• ENGL 3010, Writing in the Professions	3	ENGL 2010
TOTAL	**64**	

CS Emphasis Electives (9 credits from the following)	Credits	Prerequisites and Notes
• CS 3400, Operating Systems or	3	CS 2420 and CS 2810, or
CS 3410, Distributed Systems	3	CS 2420, CS 2810 and IT 2400
• CS 3500, Application Development	3	CS 1410
• CS 4000, Dynamic Web Development	3	CS 2420 and VT 1400
• CS 4010, Interactive Web Development	3	CS 2420 and VT 1400
• IT 3100, Systems Design and Administration I	3	CS 1400 and IT 2400
• IT 3110, Systems Design and Administration II	3	IT 3100
• IT 3200, Perl Programming	3	CS 1410
• IT 4200, Advanced Web Delivery	3	IT 3100 and VT 1400
• IT 4500, Information Security	3	CS 1400 and IT 3100
• MATH 1220, Calculus II	4	MATH 1210
• MATH 2210, Multivariable Calculus	3	MATH 1220
• MATH 2270, Linear Algebra	3	MATH 1210
• MATH 2280, Ordinary Differential Equations	3	MATH 2210 and MATH 2270
• MATH 3400, Probability and Statistics	3	MATH 1220
TOTAL	**9**	

Complete a minimum of 120 college-level credits (1000 and above). Complete at least 40 upper-division credits (3000 and above). Complete at least 30 upper-division credits at DSC for institutional residency. Cumulative GPA 2.0 or higher. Grade C- or higher in each Core Discipline and Elective Requirement Course. Math prerequisites requires C or higher. Courses used to fill required credits cannot be used to fill elective credit.
NOTE: This is a worksheet only. For graduation you must use the 2011-2012 Catalog.