

<b>General Education Requirements:</b> Students must complete the DSC requirements for General Education or equivalent.		
<b>CS Emphasis Requirements</b>	<b>Credits</b>	<b>Prerequisites and notes</b>
• CS 1400, Fundamentals of Programming	3	
• CS 1410, Object-Oriented Programming	3	CS 1400 (C- or higher)
• CS 2420, Intro to Algorithms and Data Structures	3	CS 1410 (C- or higher)
• CS 2450, Software Engineering	3	CS 2420 (C- or higher)
• CS 2810, Computer Organization and Architecture	3	CS 1410 (C- or higher)
• CS 3005, Programming in C++	3	CS 1410 (C- or higher)
• CS 3010, Mobile App Development	3	CS 2420 and CS 3005 (all $\geq$ C-)
• CS 3410, Distributed Systems	3	CS 2420 and CS 2810 (all $\geq$ C-)
• CS 3500, Application Development	3	CS 3005 (C- or higher)
• CS 3520, Programming Language	3	CS 2420 and CS 2810 (all $\geq$ C-)
• CS 3600, Graphics Programming	3	CS 2420 and CS 3005 (all $\geq$ C-)
• CS 4300, Artificial Intelligence	3	CS 2420, CS 2810 and CS 3005 (all $\geq$ C-)
• CS 4307, Database Design and Management	3	CS 2420 and CS 2810 (all $\geq$ C-)
• CS 4550, Compilers	3	CS 2420, CS 2810 and CS 3005 (all $\geq$ C-)
• CS 4600, Senior Project	3	Senior Status
• ENGL 3010, Writing in the Professions	3	ENGL 2010/A (C or above)
• IT 1100, Introduction to Operating Systems	3	
• IT 2400, Introduction to Networking	3	IT 1100 (C- or higher)
• MATH 1210, Calculus I	5	MATH 1050 and MATH 1060, or MATH 1065 or ACT 26 and above.
• VT 1400, Intro. to Internet Development	3	
<b>Choose one of the following:</b>		
• CS 3000, Internet Publishing and Design	3	CS 2420 (C- or higher)
• CS 4000, Dynamic Web Development	3	CS 2420 and VT 1400 (all $\geq$ C-)
• CS 4010, Interactive Web Development	3	CS 2420 and VT 1400 (all $\geq$ C-)
<b>TOTAL</b>	<b>65</b>	
<b>CS Emphasis Electives (9 credits from the following list)</b> *A course used to fulfill CIT/CS requirements cannot be used as an elective course.	<b>Credits</b>	<b>Prerequisites and Notes</b>
• CS 3000*, Internet Publishing and Design	3	CS 2420 (C- or higher)
• CS 3100, Interactive Multimedia	3	CS 2420 (C- or higher)
• CS 3310, Discrete Math	3	CS 1410 and MATH 1210 (all $\geq$ C-)
• CS 3400, Operating Systems	3	CS 2420, CS 2810, CS 3005 (all $\geq$ C-)
• CS 3510, Advanced Algorithms/Data Structures	3	CS 2420, CS 2810, CS 3310 (all $\geq$ C-)
• CS 3530, Computational Theory	3	CS 2420, CS 2810, CS 3310 (all $\geq$ C-)
• CS 4000*, Dynamic Web Development	3	CS 2420 and VT 1400 (all $\geq$ C-)
• CS 4010*, Interactive Web Development	3	CS 2420 and VT 1400 (all $\geq$ C-)
• CS 4990 Seminar in Computer Science	1-6	Instructor Permission Required
• IT 3100, Systems Design and Administration I	3	CS 1400 and IT 2400 (all $\geq$ C-)
• IT 3110, Systems Design and Administration II	3	IT 3100 (C- or higher)
• IT 3200, Perl Programming (old)	3	CS 1410 (C- or higher)
• IT 4200, Advanced Web Delivery	3	IT 3100 and VT 1400 (all $\geq$ C-)
• IT 4500, Information Security	3	IT 3100 (C- or higher)
• MATH 1220, Calculus II	4	MATH 1210 (C or higher)
• MATH 2210, Multivariable Calculus	3	MATH 1220 (C or higher)
• MATH 2270, Linear Algebra	3	MATH 1210 (C or higher)
• MATH 2280, Ordinary Differential Equations	3	MATH 1220 (C or higher)
• MATH 3400, Probability and Statistics	3	MATH 1220 (C or higher)
<b>TOTAL</b>	<b>9</b>	

**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**

Dixie State's general graduation requirements are described in this online catalog under the "Advisement and Graduation" link. Those requirements are also available in the College's online policies at

<http://www.dixie.edu/humanres/policy/sec5/520.html>.



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

Effective July 2013

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**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. For each cross-listed CS and VT course, only one may be used to fill elective credits.**

**NOTE: This is a worksheet only. For graduation you must use the 2013-2014 Catalog.**