

# Bachelor of Science in Computer & Information Technology

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The Bachelor of Science in Computer & Information Technology has four basic components:

1. General Education & Institutional Requirements
2. Core Discipline Requirements
3. Discipline Elective Requirements
4. Electives: college-level courses from any prefix to meet Graduation Requirements (p. 3)

## Institutional Requirement in Computer Literacy

The DSU Computer Literacy requirement is fulfilled by successfully completing the Computer Science Core Requirement courses CS 1400 Fundamentals of Programming and CS 1410 Object Oriented Programming.

## DSU General Education & Institutional Requirements

All DSU General Education and Institutional requirements must be fulfilled. A previously earned degree may fulfill those requirements, but courses must be equivalent to DSU's minimum General Education standards in American Institutions, English, and Mathematics.

Code	Title	Hours
<b>Institutional Requirement in Computer Literacy</b> (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		
	Computer Literacy	0-6
<b>General Education Core Requirements</b> (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		
	English	3-7
	Information Literacy	0-1
	Mathematics	3-5
	American Institutions	3-6
	Life Sciences	3-10
	Physical Sciences	3-5
	Laboratory Science	0-1
	Fine Arts	3
	Literature/Humanities	3
	Social & Behavioral Sciences	3
	Exploration	3-5
	Two (2) Global & Cultural Perspectives Courses	0-6
<b>Core Discipline Requirements</b>		
CS 1400	Fundamentals of Programming	3
CS 1410	Object Oriented Programming	3
CS 2420	Introduction to Algorithms and Data Structures	3
CS 2450	Software Engineering	3
or WEB 3450	Software Engineering	
CS 3005	Programming in C++	3
CS 3010	Mobile Application Development for Android	3
or CS 3020	Mobile Application Development: iOS	
or CS 3500	Application Development	
DES 1300	Design I	3
DES 2300	Design II	3
DES 2600	Creative Imaging	3
ENGL 3010	Writing in the Professions	3
IT 1100	Introduction to Unix/Linux	3
IT 2400	Intro to Networking	3
IT 3100	Systems Design and Administration I	3
WEB 1400	Web Design I: Fundamentals	3

WEB 3400	Web Design II: Essentials	3
WEB 3500	Electronic Commerce	3
MATH 1100 or MATH 1210	Business Calculus Calculus I	3-4
CS 4600 or DES 4600 or IT 4600 or WEB 4600	Senior Project Senior Project Senior Project Senior Project	3

**Discipline Elective Requirements**

Complete 21 credits from the following:

ARTH 3750	Graphic Design History	3
CS 2810	Computer Organization and Architecture	3
CS 3010	Mobile Application Development for Android	3
CS 3020	Mobile Application Development: iOS	3
CS 3200	Web Application Development I	3
CS 3400	Operating Systems	3
CS 3410	Distributed Systems	3
CS 3440	Software Practices	3
CS 3600	Graphics Programming	3
CS 4200	Web Application Development II	3
CS 4300	Artificial Intelligence	3
CS 4550	Compilers	3
CS 4920R	Internship	1-3
CS 4990	Sem in Computer Science	3
CS 4991R	Competitive Programming	0.5
DES 2710	Typography I	3
DES 2800	Digital Publishing	3
DES 3100	Interaction Design	3
DES 3300	Intro to Digital Video Editing	3
DES 3600	3-D Visualization	3
DES 3710	Typography II	3
DES 3780	Prepress & Print Production	3
DES 3800	Branding	3
DES 4650	Publication Design	3
DES 4900R	Independent Research	1-3
DES 4920	Internship	3
DES 4990	Seminar in Digital Design	3
IT 1200	A+ Computer Hardware/Windows OS	3
IT 3110	Systems Design and Administration II	3
IT 3150	Windows Servers	3
IT 3300	Virtualization	3
IT 4100	Files Systems and Storage Technologies	3
IT 4200	Advanced Web Delivery	3
IT 4300	Database Design & Management	3
IT 4310	Database Administration	3
IT 4400	Network Design & Management	3
IT 4500	Information Security	3
IT 4920R	Internship	1-3
IT 4990	Seminar in Inform Technology	3
MKTG 3010	Marketing Principles	3
WEB 3100	Interaction Design	3
WEB 3200	Web Application Development I	3

WEB 3550	Internet & eCommerce Marketing	3
WEB 4200	Web Application Development II	3
WEB 4400	Web Design III: Advanced Techniques	3
WEB 4900R	Independent Research	1-3
WEB 4920R	Internship	3
WEB 4990	Seminar in Web Development	3

**NOTE:** A course may only be used to fulfill one program requirement. Dual-listed courses may only be used once to fill requirements. Consult course descriptions in this catalog to verify dual-listed courses.

## Graduation Requirements

1. Complete a minimum of 120 college-level credits (1000 and above).
2. Complete at least 40 upper-division credits (3000 and above).
3. Complete at least 30 upper-division credits at DSU for institutional residency.
4. Cumulative GPA 2.0 or higher.
5. Grade C- or higher in each Core Discipline and Elective Requirement course.

## Graduation Plan

Course	Title	Hours
<b>1st Year</b>		
<b>Fall Semester</b>		
DES 1300	Design I	3
ENGL 1010	Introduction to Writing	3
LIB 1010	Information Literacy	1
MATH 1100	Business Calculus meet General Education (Mathematics) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )	3
General Elective (DES 1100 Intro to Digital Design)		3
Hours		13
<b>Spring Semester</b>		
CS 1400	Fundamentals of Programming ( CS 1400 & CS 1410 meet Computer Literacy ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> ))	3
ENGL 2010	Intern Writing Selected Topics:	3
IT 1100	Introduction to Unix/Linux	3
WEB 1400	Web Design I: Fundamentals	3
General Education (Social & Behavioral Sciences) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
Hours		15
<b>2nd Year</b>		
<b>Fall Semester</b>		
CS 1410	Object Oriented Programming ( CS 1400 & CS 1410 meet Computer Literacy ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> ))	3
DES 2300	Design II	3
IT 2400	Intro to Networking	3
General Education (American Institutions) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
General Education (Fine Arts) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
Hours		15
<b>Spring Semester</b>		
CS 2420	Introduction to Algorithms and Data Structures	3
CS 3005	Programming in C++	3
DES 2600	Creative Imaging	3
WEB 3400	Web Design II: Essentials	3
General Education (Literature/Humanities) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
Hours		15

**3rd Year****Fall Semester**

CS 2450 or WEB 3450	Software Engineering or Software Engineering	3
IT 3100	Systems Design and Administration I	3
General Education (Life Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
General Education (Physical Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
General Education (Lab Science) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		1
General Elective		3
Hours		16

**Spring Semester**

CIT Elective		3
CIT Elective: Upper Division		3
ENGL 3010	Writing in the Professions	3
WEB 3500	Electronic Commerce	3
General Education (Exploration) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
Hours		15

**4th Year****Fall Semester**

CS 3500 or CS 3020	Application Development or Mobile Application Development: iOS	3
CIT Elective: Upper Division		3
CIT Elective: Upper Division		3
CIT Elective: Upper Division		3
CIT Elective: Upper Division		1
General Education (Global & Cultural Perspectives) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext) <sup>1</sup>		3
Hours		16

**Spring Semester**

CS, DES, IT, or WEB 4600		3
CIT Elective: Upper Division		3
CIT Elective: Upper Division		3
General Education (Global & Cultural Perspectives) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		3
General Elective		3
Hours		15
Total Hours		120