

# Information Systems - Application Development Emphasis, B.S.

The BS in Information Systems program prepares students to be Information Systems professionals. Graduates develop and deploy enterprise-level systems to meet organizational needs.

## Program Requirements

Code	Title	Credit Hours
<b>Total Credit Hours</b>		<b>123</b>
<b>Information Systems Requirements</b>		<b>99 Credits</b>
Complete the requirements		99
<b>Emphasis Requirements</b>		<b>24 Credits</b>
INFO 3330	Client-Side Web Development	3
INFO 3360	Server-Side Web Frameworks	3
INFO 4420	Mobile Application Development	3
CYBR 4350	Web and Application Security	3
INFO 4300	Enterprise Web Development	3
Emphasis Elective Requirements		
Complete 9 credit hours from the following:		9
INFO 4120	Data Visualization (3)	
INFO 481R	Internship (3)	
CS 2550	Web Programming I (3)	
CS 3270	Python Software Development (3)	
CS 3410	Human Factors in Software Development (3)	
CS 3660	Web Programming II (3)	
Other approved upper-division Information Systems courses		

## Core Requirements

Code	Title	Credit Hours
<b>Total Credit Hours</b>		<b>99</b>
<b>General Education Requirements</b>		<b>36 Credits</b>
ENGL 1010 or ENGL 1005	Introduction to Academic Writing CC Literacies and Composition Across Contexts CC	3
ENGL 2010	Intermediate Academic Writing CC	3
MATH 1050 or MATH 1055	College Algebra QL College Algebra with Preliminaries QL	4
American Institutions:		
Complete one of the following:		3
HIST 2700 & HIST 2710	US History to 1877 AS and US History since 1877 AS (6)	
HIST 1700	American Civilization AS (3)	
HIST 1740	US Economic History AS (3)	
POLS 1000	American Heritage AS (3)	
POLS 1100	American National Government AS (3)	
PHIL 2050	Ethics and Values IH	3
HLTH 1100 or EXSC 1097	Personal Health and Wellness TE Fitness for Life TE	2

Distribution Courses:		
Biology Distribution		3
Physical Science Distribution		3
An Additional Biology or Physical Science Distribution Course		3
Fine Arts Distribution		3
Humanities Distribution		3
Social/Behavioral Science Distribution <sup>1</sup>		3
<b>Discipline Core Requirements</b>		<b>63</b>
		<b>Credits</b>
Math Requirement:		
MGMT 2340	Business Statistics I	3
IS Core Requirements:		
INFO 1120	Information Systems and Technology Fundamentals	3
INFO 1200	Computer Programming I for IS IT	3
or CS 1400	Fundamentals of Programming	
INFO 2200	Computer Programming II for IS IT	3
INFO 2410	Database Fundamentals	3
INFO 2420	Web Application Design	3
IM 2600	Spreadsheet Applications	3
IT 1510	Introduction to System Administration--Linux/UNIX	3
IT 2600	Data Communication Fundamentals	3
CYBR 2700	Information Security Fundamentals	3
INFO 3130	Introduction to Applied Data Analytics	3
INFO 3300	Web Systems Development	3
INFO 3410	Database Systems and Warehousing	3
INFO 3430	Systems Analysis and Design WE	3
INFO 405G	Global Ethical and Professional Perspectives in IS and IT GI WE	3
INFO 4430	Systems Design and Implementation	3
IS Environment/Business Foundation Requirements:		
MKTG 220G	Written Business Communication GI WE	3
ACC 2110	Principles of Accounting I	3
MGMT 3000	Organizational Behavior WE	3
MKTG 3600	Principles of Marketing	3
Any 3-credit 1000 or 2000 level course from ACC, ECON, FIN, MGMT, HR, MKTG		3

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ECON 2010 Principles of Economics I SS recommended.

## Graduation Requirements

1. Completion of at least 123 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.
6. Successful completion of at least two Writing Enriched (WE) courses.

## Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (<http://www.uvu.edu/wolverinetrack/>).

**First Year**

<b>Semester 1</b>		<b>Credit Hours</b>
ENGL 1010	Introduction to Academic Writing CC	3
MATH 1050 or MATH 1055	College Algebra QL or College Algebra with Preliminaries QL	4
INFO 1120	Information Systems and Technology Fundamentals	3
INFO 2410	Database Fundamentals	3
HLTH 1100 or EXSC 1097	Personal Health and Wellness TE or Fitness for Life TE	2
<b>Credit Hours</b>		<b>15</b>

**Semester 2**

ENGL 2010	Intermediate Academic Writing CC	3
INFO 1200	Computer Programming I for IS IT	3
INFO 2420	Web Application Design	3
MKTG 220G	Written Business Communication GI WE	3
ACC 2110	Principles of Accounting I	3
<b>Credit Hours</b>		<b>15</b>

**Second Year**

**Semester 3**

MGMT 2340	Business Statistics I	3
IM 2600	Spreadsheet Applications	3
INFO 2200	Computer Programming II for IS IT	3
INFO 3300	Web Systems Development	3
Any 3-credit 1000 or 2000 level course from ACC, ECON, FIN, MGMT, HR, MKTG		3
<b>Credit Hours</b>		<b>15</b>

**Semester 4**

INFO 3330	Client-Side Web Development	3
INFO 3360	Server-Side Web Frameworks	3
INFO 3410	Database Systems and Warehousing	3
INFO 3130	Introduction to Applied Data Analytics	3
IT 1510	Introduction to System Administration--Linux/UNIX	3
<b>Credit Hours</b>		<b>15</b>

**Third Year**

**Semester 5**

IT 2600	Data Communication Fundamentals	3
Fine Arts Distribution		3
Humanities Distribution		3
INFO 3430	Systems Analysis and Design WE	3
INFO 4300	Enterprise Web Development	3
<b>Credit Hours</b>		<b>15</b>

**Semester 6**

CYBR 2700	Information Security Fundamentals	3
Elective		3
INFO 4420	Mobile Application Development	3
INFO 4430	Systems Design and Implementation	3
MGMT 3000	Organizational Behavior WE	3
INFO 405G	Global Ethical and Professional Perspectives in IS and IT GI WE	3
<b>Credit Hours</b>		<b>18</b>

**Fourth Year**

**Semester 7**

MKTG 3600	Principles of Marketing	3
Third Science Distribution		3
Elective		3
Elective		3
CYBR 4350	Web and Application Security	3
<b>Credit Hours</b>		<b>15</b>

**Semester 8**

Physical Science Distribution		3
Biology Distribution		3
Social/Behavioral Science Distribution		3
PHIL 2050	Ethics and Values IH	3

American Institutions	3
<b>Credit Hours</b>	<b>15</b>
<b>Total Credit Hours</b>	<b>123</b>

## Program Learning Outcomes

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Support the delivery, use, and management of information systems within an information systems environment.
7. Develop functional, efficient, and effective applications that addresses organizational needs.