

## Information Technology - Computer Forensics and Security Emphasis, B.S.

### Requirements

Electronic data is often used as evidence in court. Forensic specialists learn how to identify, preserve, and extract data from electronic devices, such as computers and smart phones. The Bachelor of Science in Information Technology (IT) degree prepares students to install, manage, and maintain the computing infrastructure on which organizational systems run. The Computer Forensics and Security emphasis provides students with a solid foundation for employment by government or corporate sector to work in a computer forensics lab as a forensic analyst or in information security.

#### Total Program Credits: 123

General Education Requirements:		38 Credits	
	ENGL 1010	Introduction to Writing	3
	ENGL 2010	Intermediate Writing--Humanities/Social Sciences	3
or	ENGL 2020	Intermediate Writing--Science and Technology (3.0)	
	MATH 1050	College Algebra	4
or	MATH 1055	College Algebra with Preliminaries (5.0)	
Complete one of the following:		3	
	HIST 2700	US History to 1877 (3.0)	
and	HIST 2710	US History since 1877 (3.0)	
	HIST 1700	American Civilization (3.0)	
	HIST 1740	US Economic History (3.0)	
	POLS 1000	American Heritage (3.0) (recommended)	
	POLS 1100	American National Government (3.0)	
Complete the following:			
	PHIL 2050	Ethics and Values	3
	HLTH 1100	Personal Health and Wellness	2
or	PES 1097	Fitness for Life (2.0)	
Distribution Courses:			
	Biology Distribution		3
	Physical Science Distribution		3
	PHYS 2010	College Physics I (fulfills Additional Biology or Physical Science Distribution)	4
and	PHYS 2015	College Physics I Lab	1
	Fine Arts Distribution		3
	ENGL 2310	Technical Communication (fulfills Humanities Distribution)	3
	CJ 1010	Introduction to Criminal Justice (Social/ Behavioral Science Distribution)	3
Discipline Core Requirements:		64 Credits	
Math Requirement:			
	STAT 2050	Introduction to Statistical Methods (4.0)	
or	MGMT 2340	Business Statistics I	3
IT Core Requirements:			
	INFO 1120	Information Systems and Technology Fundamentals	3
	INFO 1200	Computer Programming I for IS/IT	3

	IT 1510	Introduction to System Administration--Linux/UNIX	3
	IT 1600	Computer Architecture and Systems Software	3
	INFO 2410	Database Fundamentals	3
	IT 2530	Introduction to System Administration--Windows Client	3
	IT 2600	Data Communication Fundamentals	3
or	CS 2600	Computer Networks I (3.0)	
	IT 2700	Information Security Fundamentals	3
	COMP 301R	Digital Lecture Series	1
	INFO 3420	Web Systems Development	3
	INFO 3430	Systems Analysis and Design	3
	IT 3510	Advanced System Administration--Linux/UNIX	3
	IT 3530	Advanced System Administration--Windows Server	3
	IT 3600	Internetworking and Router Management	3
	IT 3700	Information Security--Network Defense and Countermeasures	3
	INFO 405G	Global Ethical and Professional Perspectives in IS and IT	3
	INFO 4430	Systems Design and Implementation	3
	IT 4600	Enterprise Architectures and Virtualization	3
	IT 4700	Enterprise Information Security Management	3
IT Application Domain Requirement:		6	
Two specified courses to provide students with knowledge of an application domain of their choice and interest. (See department advisor for list of approved courses.) For the Computer Forensics and Security emphasis, the following 2 courses are required: CJ 1330 and CJ 1340.			
Some possible application domains are:			
	Accounting/IT Auditor		
	Business		
	Communications		
	Computer Science		
	Construction		
	Criminal Justice (Choose this domain for Computer Forensics and Security emphasis)		
	Forensics		
	Geographic Information Systems		
	Health professions		
	Hospitality Management		
	Manufacturing/Production		
	Military Science		
	Multimedia/Digital Media		
	Physical Sciences		
	Social Sciences		
Emphasis Requirements:		12 Credits	
	IT 2800	Computer Forensic Fundamentals	3
	IT 3350	Intellectual Property and Cyber Law	3
	IT 4800	Advanced Mobile Devices Forensics	3

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	IT 4850	Digital Forensics Investigations	3
Emphasis Elective Requirements:			9 Credits
Select 9 credit hours from the following:			9
	INFO 3410	Database Systems and Warehousing (3.0)	
	INFO 3422	PHP Web Application Development (3.0)	
	INFO 4135	Data Security Analytics (3.0)	
	INFO 4415	Database Security and Auditing (3.0)	
	INFO 4425	Web Application Security (3.0)	
	IT 1200	Scripting for Administrators (3.0)	
	IT 3540	Mac OS and Server Support (3.0)	
	IT 459R	Current Topics in Information Technology (3.0)	
	IT 4750	Network Security and Operations Capstone (3.0)	
	IT 481R	Internship (1.0)	
Other approved upper-division Information Technology and Information Systems courses			

### **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. Completion of GE global intercultural requirement. INFO 405G satisfies this requirement.
6. Successful completion of at least one Global/Intercultural course.

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**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](#).

Milestone courses (pre-requisites for a course in one of the subsequent semesters) are marked in red and italicized.

Semester 1	Course Title	Credit Hours
<i>ENGL 1010</i>	Introduction to Writing	3
<i>CJ 1010</i>	Intro to Criminal Justice (fulfills Social/Behavioral Science Distribution)	3
HLTH 1100 or PES 1097	Personal Health and Wellness or Fitness for Life	2
<i>INFO 1120</i>	Information Systems and Technology Fundamentals	3
<i>IT 1510</i>	Introduction to System Administration--Linux/UNIX	3
<i>IT 1600</i>	Computer Architecture and Systems Software	3
	Semester total:	17
Notes: (1) Must take CJ 1010 this semester for the Social/Behavioral Science distribution to be able to take CJ 1330 next semester.		
Semester 2	Course Title	Credit Hours
<i>ENGL 2010 or ENGL 2020</i>	Intermediate Writing	3
<i>MATH 1050 or MATH 1055</i>	College Algebra or College Algebra with Preliminaries	4
<i>INFO 1200</i>	Computer Programming I for IS/IT	3
<i>IT 2530</i>	Introduction to System Administration--Windows Client	3
<i>CJ 1330</i>	Criminal Law (Domain)	3
	Semester total:	16
Notes: (1) Students with an emphasis in Computer Forensics and Security must take the Criminal Justice Domain. Take CJ 1330 this semester. (2) Take IT 2530 this semester to be able to take IT 3530 Semester 4.		
Semester 3	Course Title	Credit Hours
<i>ENGL 2310</i>	Technical Communication (fulfills Humanities Distribution)	3
	Biology Distribution	3
<i>INFO 2410</i>	Database Fundamentals	3
<i>IT 2600 (recommended) or CS 2600</i>	Data Communication Fundamentals or Computer Networks I	3
<i>CJ 1340</i>	Criminal Investigations (Domain)	3
	Semester total:	15
Notes: (1) IT majors must take ENGL 2310 for the Humanities Distribution. (2) Must take IT 2600 this semester to be able to take IT 2700 and IT 3510 next semester. (3) Can take PHYS 2010 and 2015 instead of Biology distribution this semester.		
Semester 4	Course Title	Credit Hours
STAT 2050 or	Introduction to Statistical Methods or	3

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MGMT 2340	Business Statistics I	
<i>IT 2700</i>	Information Security Fundamentals	3
<i>IT 2800</i>	Computer Forensic Fundamentals	3
<i>IT 3510</i>	Advanced System Administration-Linux/UNIX	3
Elective		3
	Semester total:	15

Notes: (1) Take statistics by the end of the second year.

Semester 5	Course Title	Credit Hours
PHIL 2050	Ethics and Values	3
PHYS 2010	College Physics (fulfills additional Biology or Physical Science Distribution)	4
PHYS 2015	College Physics Lab	1
COMP 301R	Digital Lecture Series	1
<i>IT 3350</i>	Intellectual Property and Cyber Law	3
<i>IT 3530</i>	Advanced System Administration-Windows Server	3
	Semester total:	15

Notes: (1) Take Biology distribution if completed PHYS 2010 and PHYS 2015 in Semester 3. (2) IT 3350 is offered Fall and Summer semesters only.

Semester 6	Course Title	Credit Hours
POLS 1000	American Heritage (recommended for American Institutions)	3
Physical Science Distribution		3
INFO 3420	Web Systems Development	3
<i>IT 3600</i>	Internetworking and Router Management	3
<i>IT 3700</i>	Info Security--Network Defense and Countermeasures	3
	Semester total:	15

Semester 7	Course Title	Credit Hours
<i>INFO 3430</i>	Systems Analysis and Design	3
INFO 405G	Global Ethical and Professional Perspectives in IS and IT	3
IT 4600	Enterprise Architectures and Virtualization	3
IT 4850	Digital Forensics Investigations	3
Elective		3
	Semester total:	15

Notes: (1) Must take INFO 3430 the semester before taking INFO 4430. (2) IT 4850 is offered Fall semesters only upon sufficient enrollment. Check with advisor for offering.

Semester 8	Course Title	Credit Hours
Fine Art Distribution		3
INFO 4430	Systems Design and Implementation	3
IT 4700	Enterprise Architectures and Virtualization	3
IT 4800	Advanced Mobile Devices Forensics	3
Elective		3
	Semester total:	15

Notes: (1) Must take INFO 4430 the semester immediately after INFO 3430. (2) IT 4800 is offered Fall semesters only.

Degree total:	123
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