

Information Technology - Network Administration and Security Emphasis, B.S.

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Requirements

Every organization uses some form of information technology to perform its operations. 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 Network Administration and Security emphasis prepares students to work as data communication consultants, information security analysts, and network administrators. The core of the BS IT program prepares students to have a strong foundation in computer architecture, data communication, information security, networks, and system administration.

Total Program Credits: 122

General Education Requirements:		38 Credits
	ENGL 1010 Introduction to Academic Writing CC	3
or	ENGH 1005 Literacies and Composition Across Contexts CC (5)	
	ENGL 2010 Intermediate Academic Writing CC	3
	MATH 1050 College Algebra QL	4
or	MATH 1055 College Algebra with Preliminaries QL (5)	
Complete one of the following:		3
	HIST 2700 US History to 1877 AS (3.0)	
and	HIST 2710 US History since 1877 AS (3.0)	
	HIST 1700 American Civilization AS (3.0)	
	HIST 1740 US Economic History AS (3.0)	
	POLS 1000 American Heritage SS (3.0) (recommended for Forensics emphasis)	
	POLS 1100 American National Government AS (3.0)	
Complete the following:		
	PHIL 2050 Ethics and Values IH	3
	HLTH 1100 Personal Health and Wellness TE	2
or	EXSC 1097 Fitness for Life TE (2)	
Distribution Courses:		
	Biology Distribution	3
	Physical Science Distribution	3
	PHYS 2010 College Physics I PP	4
and	PHYS 2015 College Physics I Lab (fulfills Additional Biology or Physical Science Distribution)	1
	Fine Arts Distribution	3
	ENGL 2100 Technical Communication HH WE	3
	Social/Behavioral Science Distribution ¹	3
Discipline Core Requirements:		69 Credits
Math Requirement:		

	CS 2300 Discrete Mathematical Structures I	3
	STAT 2050 Introduction to Statistical Methods	3
or	MGMT 2340 Business Statistics I	
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 2200 Computer Programming II for IS IT	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)	
	IT 2700 Information Security Fundamentals	3
	INFO 3300 Web Systems Development	3
	INFO 3430 Systems Analysis and Design WE	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 Ethical Hacking and Countermeasures	3
	INFO 405G Global Ethical and Professional Perspectives in IS and IT GI WE	3
	IT 4600 Enterprise Network Architectures and Administration	3
	IT 4700 Enterprise Information Security Management	3
	IT 4750 Information Technology Operations Capstone	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.) ²		
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	

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	Manufacturing/Production	
	Military Science	
	Multimedia/Digital Media	
	Physical Sciences	
	Social Sciences	
Emphasis Requirements:		6 Credits
IT 2400	Voice and Data Cabling Fundamentals	3
INFO 4425	Web Application Security	3
Emphasis Elective Requirements:		9 Credits
Complete 9 credit hours from the following (6 credits must be 3000 or higher):		9
INFO 3330	Client-Side Web Development (3)	
INFO 3360	Server-Side Web Frameworks (3)	
INFO 3410	Database Systems and Warehousing (3)	
INFO 4135	Data Security Analytics (3)	
INFO 4410	Database Administration (3)	
INFO 4415	Database Security and Auditing (3)	
INFO 459R	Current Topics in Information Systems (3)	
IT 3350	Intellectual Property and Cyber Law (3)	
IT 3540	Mac OS and Server Support (3)	
IT 459R	Current Topics in Information Technology (3)	
IT 481R	Internship (1-8)	
CS 3270	Python Software Development (3)	
Other approved upper-division Information Technology and Information Systems courses		
Notes:		
<ol style="list-style-type: none"> 1. CJ 1010 Introduction to Criminal Justice SS for Forensics emphasis 2. For the Computer Forensics and Security emphasis, the following 2 courses are required: CJ 1330 Criminal Law and CJ 1340 Criminal Investigations. 		

Graduation Requirements:

1. Completion of at least 122 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.
7. Successful completion of at least two Writing Enriched (WE) courses.

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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](#).

Semester 1	Course Title	Credit Hours
ENGL 1010	Introduction to Academic Writing CC	3
MATH 1050 or MATH 1055	College Algebra QL or College Algebra with Preliminaries QL	4
Social/Behavioral Science		3
INFO 1120	Information Systems and Technology Fundamentals	3
IT 1510	Introduction to System Administration-Linux/UNIX	3
	Semester Total:	16
Semester 2	Course Title	Credit Hours
ENGL 2010	Intermediate Academic Writing CC	3
Fine Arts Distribution		3
PHYS 2010	College Physics I PP	4
PHYS 2015	College Physics I Lab	1
INFO 1200	Computer Programming I for IS IT	3
IT 1600	Computer Architecture and Systems Software	3
	Semester Total:	17
Semester 3	Course Title	Credit Hours
MGMT 2340	Business Statistics I	3
PHIL 2050	Ethics and Values IH	3
INFO 2200	Computer Programming II for IS IT	3
INFO 2410	Database Fundamentals	3
IT 2600	Data Communication Fundamentals	3
	Semester Total:	15
Semester 4	Course Title	Credit Hours
HLTH 1100 or EXSC 1097	Personal Health and Wellness TE or Fitness for Life TE	2
INFO 3300	Web Systems Development	3
IT 2400	Voice and Data Cabling Fundamentals	3
IT 2530	Introduction to System Administration-Windows Client	3
IT 2700	Information Security Fundamentals	3
	Semester Total:	14
Semester 5	Course Title	Credit Hours
Biology Distribution		3
ENGL 2100	Technical Communication HH WE	3
CS 2300	Discrete Mathematical Structures I	3

IT 3510	Advanced System Administration-Linux/UNIX	3
IT 3600	Internetworking and Router Management	3
	Semester Total:	15
Semester 6	Course Title	Credit Hours
Physical Science Distribution		3
IT Application Domain		3
IT 3530	Advanced System Administration-Windows Server	3
IT 3700	Ethical Hacking and Countermeasures	3
IT 4600	Enterprise Network Architectures and Administration	3
	Semester Total:	15
Semester 7	Course Title	Credit Hours
American Institutions		3
IT Application Domain		3
INFO 3430	Systems Analysis and Design WE	3
IT 4700	Enterprise Cybersecurity Management	3
Emphasis Elective		3
	Semester Total:	14
Semester 8	Course Title	Credit Hours
INFO 405G	Global Ethical and Professional Perspectives in IS and IT GI WE	3
INFO 4425	Web and Application Security	3
IT 4750	Network Security and Operations Capstone	3
Emphasis Elective		3
Emphasis Elective		3
	Semester Total:	15
	Degree total:	122