

Information Technology, BS

Program Description

The Bachelor of Science degree in Information Technology (IT) will prepare students for a wide range of job opportunities such as systems analyst, network administrator, systems administrator, and IT administrator. Students will learn to apply their skills to real world problems arising in various settings, as they master new technological techniques. This applied approach will motivate IT majors to develop the skills and knowledge necessary to solve complex organizational problems using technology.

Students will develop the knowledge and skills necessary for immediate employment and/or entrance into graduate school.

Program Curriculum

120 credits

Information Technology Core Requirements

Code	Title	Hours
CS 1400	Fundamentals of Programming	3
CS 1410	Object Oriented Programming	3
IT 1100	Introduction to Unix/Linux	3
IT 1200	A+ Computer Hardware/Windows OS	3
IT 2300	Database Design & Management	3
IT 2400	Intro to Networking	3
IT 2500	Cloud Computing	3
IT 2700	Information Security	3
IT 3100	Systems Design and Administration	3
IT 3150	Windows Servers	3
IT 3400	Intermediate Computer Networking	3
IT 4600	Senior Capstone	3
ENGL 3010	Professional Writing and Business Ethics	3
MATH 1040 or MATH 1050	Introduction to Statistics (MA) (Prerequisite: MATH 1010 or equivalent placement score) College Algebra / Pre-Calculus (MA)	3

Information Technology Core Elective Requirements

Code	Title	Hours
Choose 6 of the following courses:		18
IT 3110	System Automation	
IT 3300	DevOps Virtualization	
IT 4100	Files Systems and Storage Technologies	
IT 4200	DevOps Lifecycle Management	
IT 4310	Database Administration	
IT 4400	Network Design & Management	
IT 4510	Ethical Hacking & Network Defense	
IT 4920R	Internship	

Information Technology Elective Requirements

Code	Title	Hours
Choose 3 of the following courses:		9
CS 3005	Programming in C++	
ISA 2050	Management Information Systems	
IT 3110	System Automation	
IT 3300	DevOps Virtualization	

IT 4060	Big Data Analytics
IT 4070	Data Visualization and Storytelling
IT 4100	Files Systems and Storage Technologies
IT 4200	DevOps Lifecycle Management
IT 4310	Database Administration
IT 4400	Network Design & Management
IT 4510	Ethical Hacking & Network Defense
IT 4920R	Internship
IT 4990	Special Topics in Information Technology
SE 3200	Web Application Development I
SE 3400	Human-Computer Interaction
SE 4200	Web Application Development II

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 Utah Tech for institutional residency.
4. Maximum 12 upper-division transfer credits may fulfill Utah Tech Information Technology program requirements.
5. Cumulative GPA 2.0 or higher.
6. Grade C or higher in each Core Requirement, Core Elective Requirement, and Elective Requirement course.

Graduation Plan

1st Year

Fall Semester	Hours	Spring Semester	Hours
SSC 1010		2 ENGL 2010	3
ENGL 1010 or 1010D		3 CS 1410	3
MATH 1040 or 1050		3 IT 1200	3
CS 1400		3 IT 2400	3
IT 1100		3 GE Physical Science	3
Open Elective		1	
		15	15

2nd Year

Fall Semester	Hours	Spring Semester	Hours
IT 2500		3 IT 2300	3
IT 2700		3 GE Social & Behavioral	3
GE Fine Arts		3 GE Life Sciences	3
GE Literature/Humanities		3 GE Laboratory Science	1
GE American Institutions		3 GE Exploration	3
		Open Elective	2
		15	15

3rd Year

Fall Semester	Hours	Spring Semester	Hours
IT 3100		3 IT 3150	3
ENGL 3010		3 IT 3400	3
IT Core Elective (1 of 6)		3 IT Core Elective (2 of 6)	3
IT Elective (1 of 3)		3 IT Core Elective (3 of 6)	3
Open Elective		3 IT Elective (2 of 3)	3
		15	15

4th Year

Fall Semester	Hours	Spring Semester	Hours
IT Core Elective (4 of 6)		3 IT 4600	3
IT Core Elective (5 of 6)		3 IT Core Elective (6 of 6)	3

IT Elective (3 of 3)	3 Open Elective	3
Open Elective	3 Open Elective	3
Open Elective	3 Open Elective	3
	15	15

Total Hours 120

BS Information Technology Program Learning Outcomes

At the successful completion of this program, students will be able to:

1. Administer computing resources to support organizational needs, including networks, operating systems, and security configurations.
2. Create repeatable and automated infrastructure solutions.
3. Identify and resolve technical problems using troubleshooting techniques.
4. Explain ethical and legal issues impacting information technology.