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

Utah Tech General Education Requirements

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

General Education Core Requirements (catalog.utahtech.edu/programs/generaleducation/#gerequirementstext)

| Code | Title | Hours |
|------------------------------|-------|-------|
| English | | 3-7 |
| Mathematics | | 3-5 |
| American Institutions | | 3-6 |
| Life Sciences | | 3-10 |
| Physical Sciences | | 3-5 |
| Fine Arts | | 3 |
| Literature/Humanities | | 3 |
| Social & Behavioral Sciences | | 3 |

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 1500 | Cloud Fundamentals | 1 |
| 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 | Introduction to Statistics (MA) (Prerequisite: MATH 1010 or equivalent placement score) | 3 |
| or MATH 1050 | College Algebra / Pre-Calculus (MA) | |

Information Technology Core Elective Requirements

| Code | Title | Hours |
|------------------------------------|--|-------|
| Choose 6 of the following courses: | | 18 |
| IT 3110 | System Automation | |
| IT 3300 | DevOps Virtualization | |
| IT 3710 | Network Defense | |
| 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 2420 | Introduction to Algorithms and Data Structures | 3 |
| CS 2450 | Software Engineering | 3 |
| CS 2810 | Computer Organization and Architecture | 3 |
| CS 3005 | Programming in C++ | 3 |
| ISA 2050 | Management Information Systems | 3 |
| IT 3110 | System Automation | 3 |
| IT 3300 | DevOps Virtualization | 3 |
| IT 3710 | Network Defense | 3 |
| IT 3750 | Industrial Control Systems Security | 3 |
| IT 4060 | Big Data Analytics | 3 |
| IT 4070 | Data Visualization and Storytelling | 3 |
| IT 4100 | Files Systems and Storage Technologies | 3 |
| IT 4200 | DevOps Lifecycle Management | 3 |
| IT 4310 | Database Administration | 3 |
| IT 4400 | Network Design & Management | 3 |
| IT 4510 | Ethical Hacking & Network Defense | 3 |
| IT 4920R | Internship | 1-3 |
| IT 4990 | Special Topics in Information Technology | 0.5-3 |
| SE 3200 | Web Application Development I | 3 |
| SE 3250 | Internet of Things Programming | 3 |
| SE 3400 | Human-Computer Interaction | 3 |
| SE 3500 | Tech Entrepreneurship | 3 |
| SE 4200 | Web Application Development II | 3 |
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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 the current 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 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.