

Welcome Information Technology

UT offers a 4-year Degree in Information Technology. This degree is for students that have interest in System Administration, Security, or Networking. Students can also choose to sub-specialize in a DevOps emphasis or a Cybersecurity emphasis within the IT degree.

Below you will find descriptions of each of these fields as well as many of the job requirements employers are requesting. Additionally, you will find UT course listings next to the job requirements. These course listings correspond to specific courses that teach the skills employers seek. Please take the time to browse through these careers and course offerings below. We also invite you to come in and test drive the latest in computer hardware and software and explore your technical abilities while you learn with us at Utah Tech University's Information Technology program.

Systems Design and Administration - Security - Networking

Systems administrators manage unix and windows servers including the hardware, software, data, network, and data transmission devices. CIT courses that teach systems administration skills include:

- CS 1400 Fundamentals of Programming
- <u>CS 1410 Object Oriented Programming</u>
- CS 2420 Introduction to Algorithms and Data Structures
- <u>CIT 1001 First Year Experience</u>
- <u>IT 1100 Introduction to Operating Systems</u>
- <u>IT 1200 A+ Computer Hardware</u>
- <u>IT 2300 Database Design and Management</u>
- IT 2400 Introduction to Networking
- IT 2700 Information Security
- IT 3100 Systems Design and Administration I
- IT 3110 Systems Design and Administration II
- IT 3150 Windows Server Installation and Configuration
- IT 3400 Cisco Switching, Routing and Wireless Essentials
- IT 4200 Advanced Web Delivery
- IT 4310 Database Administration
- IT 4400 Network Design and Management
- IT 4600 Senior Project
- IT 4920 Internship
- IT 4990-40 Special Topics in Cybersecurity

Many of the job requirments of systems administrators include:

- 4 year degree in CS, IT, CIT or related field
- experience in the systems administration managing servers, software, hardware, networks, etc.
- Proficiency in computer programming C++ (CS1400 and CS1410), Java, Unix and other OSs (IT IT1100,
- IT3100, IT3110), DNS (IT3100), Databases (IT4300), Web Servers Apache (IT4200), Network management (IT2400 and IT4400) etc.

- Proficiencies backup and storage devices and processes, diaster recovery, etc.
- High level networking skills
- Linux, Cisco, Macintosh, and PC skills

Career Information Sites:

- IT Jobs Regional Listings (300 miles of Utah Tech)
- National Wages for Computing Careers from U.S. Department of Labor
- <u>Utah Wages for Computing Careers from U.S. Department of Labor</u>
- <u>Utah Wages by Career from Utah.gov</u>
- <u>Utah Labor Report</u>