

Information Technology FY2024 / (600 Clock-Hours)

Foundational Courses

Aligned

TEIT 1200 A+ Core I 90 Clock-Hours

A+ Core I prepares students to be successful computer technicians, capable of installing, maintaining, troubleshooting, optimizing, and securing desktop computers, laptops, mobile devices, and printers. This course aligns with objectives of the CompTIA A+ Core 1 certification exam.

Objectives:

- Install and configure computer hardware components and peripheral devices.
- · Identify and configure basic networking components and protocols.
- Install and configure laptops and other mobile devices.
- Diagnose and troubleshoot device and network issues.
- Compare and contrast cloud computing concepts.
- · Configure client-side virtualization.

TEIT 1210 A+ Core II 90 Clock-Hours

A+ Core II is a follow-up to A+ Core1 and provides further instruction on installation, configuration, maintenance, and security of various common operating systems and platforms. This course aligns with the objectives of the CompTIA A+ Core 2 certification exam.

Objectives:

- Install and Configure Windows, Mac, and Linux.
- · Identify best practices for safety, environmental impacts, communication, and professionalism.
- Troubleshoot common operating system, malware, and security issues.
- Identify basic vulnerabilities and protect against threats.
- Install, configure, and maintain software in computers and mobile devices.

TEIT 1300 Linux Foundations

60 Clock-Hours

Linux Foundations focuses on the installation, configuration, and process management of a Linux workstation. Students explore shell programming, file system management, user accounts, access and permissions, and application installation and management.

- Install and maintain a Linux workstation.
- · Configure Linux from the GUI and command line.
- Configure file and access permissions.
- Perform maintenance tasks including user management, backup and restore, shut down, and reboot.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1100 Introduction to Networking

30 Clock-Hours

Introduction to Networking provides foundational-level instruction on the concepts, models, services, settings, protocols, topologies, and devices used in computer networks. Students also explore the Open Systems Interconnection (OSI) and Transmission Control Protocol/Internet Protocol (TCP/IP) models.

Objectives:

- Define common concepts and terms associated with computer networking.
- Identify and differentiate the purpose and function of common networking devices.
- Identify and differentiate common networking ports, protocols and services.
- Identify components of the OSI and TCP/IP models.
- Compare and contrast network topologies and access methods.

TEIT 1050 Career and Workplace Relations

30 Clock-Hours

Career and Workplace Relations is designed to help students gain insight into how their skills and professionalism enhance relationships between management and coworkers. Instruction includes employment skills such as communication, critical thinking, professional etiquette, team dynamics and more.

Objectives

- Identify personal and transferable skills, competencies and/or abilities.
- Create an industry specific resume, cover letter, thank you letter, reference list, and online presence.
- Demonstrate effective interviewing skills.
- Submit an application for an industry specific position.
- · Demonstrate effective use of job search websites.

Supplemental Courses Varies by Institution

Bridgerland Technical College

TEIT 1040 Introduction to Virtualization

30 Clock-Hours

Introduction to Virtualization explores what virtualization is and the critical role it plays in IT. Learn how to install, configure, and maintain virtual machines as well as the availability, applications, and virtual appliances, including their role in virtualization.

- Explore virtualization and the benefits gained from a virtual environment.
- Demonstrate how to enable virtualization on a host system.
- · Install operating systems on virtual machines.
- Import/Export virtual machines for use in different virtualization platforms.
- Configure basic processing, memory, storage, and networking in a virtual environment.
- Demonstrate how to copy, backup, and restore virtual machines.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1290 Linux Computing with Raspberry Pi

60 Clock-Hours

This course will provide students the opportunity to use the Linux operating system to create ten useful projects using a Raspberry Pi computer and various peripherals.

Objectives:

- Explain basic functionality and limitations of Raspberry Pi computers.
- Demonstrate programming using Raspbian and other Linux-based operating systems.
- Explore thousands of project ideas that can be created using Linux and a Raspberry Pi.
- Troubleshoot software and hardware errors.
- Create ten useful projects using a Raspberry Pi computer.

TEIT 1400 Introduction to Cloud

60 Clock-Hours

Introduction to Cloud provides instruction on core cloud computing concepts, services, and solutions as well as foundational knowledge from a business value perspective of the benefits and considerations for cloud computing implementation. Included is an overview of popular cloud platforms.

Objectives:

- Define the value proposition of cloud computing.
- Identify core cloud concepts, services, solutions, and management tools.
- Demonstrate an understanding of cloud security considerations, features, and best practices.
- Describe cloud identity, governance, privacy, and compliance concepts and features.
- Compare and contrast cloud pricing models and identify cost management solutions.
- Define cloud deployment models, methods, and operations.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1820 Certification Test Prep III

30 Clock-Hours

Certification Test Prep III provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1830 Certification Test Prep IV

30 Clock-Hours

Certification Test Prep IV provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

TEIT 1840 Certification Test Prep V

30 Clock-Hours

Certification Test Prep V provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1850 Certification Test Prep VI

30 Clock-Hours

Certification Test Prep VI provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 2140 Network Traffic Analysis

30 Clock-Hours

This course provides instruction on the fundamental basics of network traffic analysis. This course will cover the process of recording, reviewing, and analyzing network traffic for performance, security and/or general network operations and management.

Objectives:

- Describe and evaluate network utilization.
- Record, filter and analyze different types of network traffic.
- Demonstrate use of network analysis tools.
- Identify types of network connections.

TEIT 2200 Security + 120 Clock-Hours

Security+ provides instruction on assessing the security posture of enterprise environments and implementing appropriate security solutions. Instruction is given to identify, analyze, and respond to events and incidents. This course aligns with the objectives of the CompTIA Security+ certification exam.

Objectives:

- Explain security functions and purposes as they relate to network devices.
- · Identify and implement risk mitigation techniques and strategies.
- Distinguish and evaluate different network and physical security threats.
- Implement network intrusion detection and prevention technologies.
- · Identify and execute appropriate cryptography measures.

TEIT 2998 Service Desk Internship

90 Clock-Hours

This course provides instruction on customer support, technical documentation, and advanced troubleshooting techniques in a service desk environment. Students will have opportunities to work directly with customers' personal equipment in a supervised environment. (Requires adviser approval).

Objectives:

- Demonstrate Advanced troubleshooting techniques and processes.
- Document product, customer, and repair information in database.
- Demonstrate how to find and research information to properly diagnose and repair personal computers

TEIT 2999 IT Externship

90 Clock-Hours

Students will have the opportunity to develop real-world work experiences using knowledge and skills they have obtained in the program. Students will gain practical application of classroom skills through actual work situations. IT projects will be assigned to the student by cooperative businesses. Students will receive objective feedback on their performance each month. Customized student learning objectives will be developed addressing the individual needs of the organization and career interests of each student by the cooperative business and the student.

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Demonstrate ability to work independently.
- Demonstrate ability to receive constructive criticism.
- Write cooperatively with faculty and agency to create personalized objectives to be accomplished during the internship.



Information Technology FY2024 / (600 Clock-Hours)

TEDA 1030 Python Programming

90 Clock-Hours

The Python Programming course introduces the Python programming language. Topics include basic Python syntax, procedural programming concepts, data types, decision and control structures, working with data analytics-related Python libraries, and creating and running functions. Students use both command prompt and industry standard integrated development environments (IDEs) to create and run their Python code. Students completing this course are able to perform basic tasks in Python related to the work of the entry-level data practitioner.

Objectives:

- Demonstrate competency using an interactive development environment to write Python code.
- Write basic Python code to structure, clean, and analyze data.
- Demonstrate competency with conditionals for decision and control structures and data modifications.
- Demonstrate proficiency with for loop and while loop coding.
- Demonstrate proficiency with data types and functions for analysis and use of data.

Davis Technical College

TEIT 1000 Information Technology Fundamentals

60 Clock-Hours

The Information Technology Fundamentals course provides an overview of the various career pathways related to working with computers. Throughout the class, students will be introduced to computers, including their history, hardware, operating systems, system support, programming languages, software, databases, networking, data storage, and system security. During this course, the student will perform essential IT tasks commonly performed by end-users and entry-level IT professionals.

Objectives:

- Identify the major components of a computer and understand their function.
- Compare and contrast the differences between various operating systems.
- · Demonstrate an understanding of basic principles of software and database development.
- · Identify foundational terms used in computing.
- Identify security issues affecting the use of computers and networks.

TEIT 1020 Foundations of Computing

60 Clock-Hours

This course provides students with a broad and basic understanding of computers. Students will explore the history of modern computers. Interact with the infrastructure that supports computers, such as networks, databases, and operating systems. Discover the process of identifying and solving real-world problems with computers. Students will create programs and build websites. Discover security and ethical behaviors associated with computer use.

- Explore the history of modern computers.
- · Interact with databases.
- Describe the infrastructure around a computer.
- · Create programs and websites.
- Discuss security and ethical behaviors



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1400 Introduction to Cloud

60 Clock-Hours

Introduction to Cloud provides instruction on core cloud computing concepts, services, and solutions as well as foundational knowledge from a business value perspective of the benefits and considerations for cloud computing implementation. Included is an overview of popular cloud platforms.

Objectives:

- Define the value proposition of cloud computing.
- Identify core cloud concepts, services, solutions, and management tools.
- Demonstrate an understanding of cloud security considerations, features, and best practices.
- Describe cloud identity, governance, privacy, and compliance concepts and features.
- Compare and contrast cloud pricing models and identify cost management solutions.
- Define cloud deployment models, methods, and operations.

TEIT 1600 Microsoft 365 Fundamentals

90 Clock-Hours

The Microsoft 365 Fundamentals course provides instruction on how Microsoft 365 solutions address common organizational technology challenges including productivity, collaboration, and communication. Topics include endpoint and application management, desktop virtualization, automated operating system deployment, Microsoft 365 licensing, deployment and migration assistance, and product support options. This course aligns with the objectives of the Microsoft MS 900 certification exam.

Objectives:

- · Identify and describe cloud concepts.
- Describe core Microsoft 365 services and solutions.
- Describe security, compliance, privacy, and trust in Microsoft 365.
- Compare and contrast Microsoft 365 licensing, pricing, and support option.

TEIT 1650 Remote Desktop Technologies

30 Clock-Hours

The hybrid workplace model mixes in-office and remote work to offer flexibility and support to employees. The modern support desk requires specialists to be knowledgeable in the usage of third-party remote software, cloud-based collaboration and sharing, Firewalls, VPN client configuration, remote desktop tools, and the virtual desktop interface. This course runs students through several real-world scenarios and hands-on labs.

- Explain key applications and connectivity options of remote work environments.
- Perform analysis, diagnosis, and resolution of connectivity issues faced in a hybrid workforce environment.
- Identify the key security principles of various cloud infrastructures, apps, and storage choices.
- Compare and contrast Virtual workspaces, VDI, and Desktop as a Service (DaaS).
- Demonstrate professional, clear, and concise verbal and written communication.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1040 Introduction to Virtualization

30 Clock-Hours

Introduction to Virtualization explores what virtualization is and the critical role it plays in IT. Learn how to install, configure, and maintain virtual machines as well as the availability, applications, and virtual appliances, including their role in virtualization.

Objectives:

- Explore virtualization and the benefits gained from a virtual environment.
- Demonstrate how to enable virtualization on a host system.
- · Install operating systems on virtual machines.
- Import/Export virtual machines for use in different virtualization platforms.
- Configure basic processing, memory, storage, and networking in a virtual environment.
- Demonstrate how to copy, backup, and restore virtual machines.

TEIT 1640 Deploying the Modern Desktop

30 Clock-Hours

As desktops have evolved, so have methods for deploying and updating them. In this course, you'll learn how to plan and implement an operating system deployment strategy. This course will help students understand the various methods available, the scenarios they're suited for, as well as how to deploy Windows using modern methods. This course will also cover planning and implementing an update strategy for Windows.

Objectives:

- Develop an Operating System deployment and upgrade strategy.
- Understand the different methods of deployment.
- Understand which scenarios on-premise and cloud-based solutions can be used for.
- Deploy and migrate desktop operating systems.
- Plan and configure Windows Update policies.

TEIT 1500 Introduction to Scripting

30 Clock-Hours

Introduction to Scripting provides instruction on basic scripting concepts. Students are introduced to scripting fundamentals to automate tasks that would otherwise be performed manually. Students explore the practical use and management of scripts to perform system administration functions.

- Demonstrate an understanding of the features of scripting languages.
- Implement critical thinking and problem-solving skills through practical exercises.
- Perform automation of systems tasks and functions.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1630 Microsoft Windows Server Administration Fundamentals

60 Clock-Hours

The Microsoft Windows Server Administration Fundamentals course offers a hands-on introduction to Windows Server administration. The student will explore basic systems administration of workstations and servers in a Windows domain, emphasizing the use of Active Directory for common everyday add, move, and change tasks.

Objectives:

- Identify, define, and describe server roles, features, and services.
- Install, configure, and manage server roles and services including Domain Controllers, Active Directory, Group Policy, DHCP, DNS, and Remote Access Services.
- Recognize and implement the proper share permissions on File and Print Servers.
- Implement effective storage solutions using RAID and other fault-tolerant storage technologies.
- Identify the importance of security updates and software update packages.
- Perform server troubleshooting, performance tuning, and maintenance.
- · Explain fault-tolerance and disaster recovery.
- Configure, manage, monitor, and troubleshoot security in a Directory Services Infrastructure.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- · Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1820 Certification Test Prep III

30 Clock-Hours

Certification Test Prep III provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1830 Certification Test Prep IV

30 Clock-Hours

Certification Test Prep IV provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

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TEIT 1105 Extended Networks

30 Clock-Hours

This course provides additional instruction on the installation, configuration and management of computer networks.

- Install and apply simulation Software such as Cisco Packet Tracer.
- Design, configure and connect network hardware for a simulated Local Area Network.
- Execute and test network function and traffic.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1215 Extended A+ 60 Clock-Hours

This course provides added instruction on installing, configuring, securing, and troubleshooting typical computer and mobile device operating systems, settings, and applications. Common operating systems such as Windows, Android, Linux, and Mac OS X are discussed in this course. Students receive education through instruction, virtual labs, simulations, and/or hands-on activities. As well as certification practice exams. This section of the course aligns with the objectives of the CompTIA A+ Core 1 & 2 certification exams.

Objectives:

- Install and configure computer hardware components and peripheral devices.
- Identify and configure basic networking components and protocols.
- Install and configure laptops and other mobile devices.
- Diagnose and troubleshoot device and network issues.
- · Compare and contrast cloud computing concepts Configure client-side virtualization.
- Install and configure Windows, Mac, and Linux.
- · Identify best practices for safety, environmental impacts, communication, and professionalism.
- Troubleshoot common operating system, malware, and security issues.
- Identify basic vulnerabilities and protect against threats.
- Install, configure, and maintain software in computers and mobile devices.

TEIT 1405 Introduction to Cloud Computing

120 Clock-Hours

This course provides instruction on basic cloud concepts such as migration, storage, virtual machines, DevOps and troubleshooting through lessons, demonstrations, exams, and hands-on virtual labs. This Course is designed to prepare students to complete all the requirements for the AWS Cloud Practitioner Certification Exam.

Objectives:

- Identify cloud types.
- Recognize cloud services and functionalities.
- Configure and work with Cloud Storage.
- Configure virtual network infrastructure.
- Install and configure the basics of Cloud security.

TEIT 2205 Security +

180 Clock-Hours

Security+ provides instruction on assessing the security posture of enterprise environments and implementing appropriate security solutions. Instruction is given to identify, analyze, and respond to events and incidents. This course aligns with the objectives of the CompTIA Security+ certification exam.

- Identify and implement access control and Identity management protocols.
- Enforce security policies, procedures, and awareness programs.
- Conduct physical security assessments and implement measures.
- · Configure perimeter defenses strategies.
- Administer and maintain network defense controls and protocols.
- Execute host defense strategies.
- Apply application security measures and defenses.
- Configure and implement data security protocols and defenses.
- Conduct audits and assessments and implement findings.
- · Apply cryptography and PKI protocols.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 2951 Final Project

90 Clock-Hours

In this course, students will demonstrate knowledge and competency in all areas of the Information Technology program. Students will actively design, connect and configure all the devices and components needed to simulate multiple Local Area Networks (LAN) and connect them together to simulate a functioning Wide Area Network with complete interconnectivity.

Objectives:

- Demonstrate the ability to troubleshoot, repair and maintain computing equipment.
- Install and configure operating systems for both servers and workstations.
- Configure and set group policy for Active Directory.
- Setup and configure networking equipment.
- Demonstrate the ability to set up and maintain security of a network, and associated equipment.
- Incorporate cloud technologies into an existing network.

Mountainland Technical College

TEIT 1000 Information Technology Fundamentals

60 Clock-Hours

The Information Technology Fundamentals course provides an overview of the various career pathways related to working with computers. Throughout the class, students will be introduced to computers, including their history, hardware, operating systems, system support, programming languages, software, databases, networking, data storage, and system security. During this course, the student will perform essential IT tasks commonly performed by end-users and entry-level IT professionals.

- Identify the major components of a computer and understand their function.
- Compare and contrast the differences between various operating systems.
- · Demonstrate an understanding of basic principles of software and database development.
- · Identify foundational terms used in computing.
- Identify security issues affecting the use of computers and networks.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1120 Customer Service Skills

30 Clock-Hours

The Customer Service course is designed for a customer service treatment in any Service Desk Curriculum. This course teaches an appropriate balance of business, technical, soft, and self-management skills that contribute to making service desks successful. The service desk curriculum provides instruction to support customers using industry standard products and technical support for various computing software.

Objectives:

- Explore what is involved in delivering excellent customer support.
- Explain how support providers can become better listeners and communicate effectively with customers and coworkers.
- Develop the skills that support providers need to interact with customers over the telephone as well as how to avoid the most common call handling mistakes.
- Discuss the impact that technologies such as the Internet, email, instant messaging, chat, knowledge management systems, and social media have had on the service desk in terms of how it collects information and delivers support.
- Explore specific techniques for handling difficult situations and minimizing the frustration and stress support providers may feel afterward.
- Help support providers understand their role in the service desk and the support organization, and how to respect and value their team members' contributions.
- Demonstrate best practices to minimize stress and avoid burnout.

TEIT 1250 Professionalism and Leadership

30 Clock-Hours

The Professionalism and Leadership course is designed to help students identify and develop soft skills for effective work between coworkers and management. The transferable skills that can enhance a resume are identified and discussed. Topics include employment skills such as team dynamics, communication, critical thinking, professional etiquette, team leadership, project management methodologies, including Agile and Scrum. Students put leadership skills into practice under a controlled environment, working with peer mentors and the classroom instructor.

Objectives:

- Identify soft skills to enhance one's effectiveness as an information technology professional.
- Contribute to a team in a professional manner.
- · Develop verbal and written communication skills.
- Explore team leadership and project management using established methodology.
- Plan, manage and complete a project and present it to stakeholders.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

Ogden-Weber Technical College

TEIT 1000 Information Technology Fundamentals

60 Clock-Hours

The Information Technology Fundamentals course provides an overview of the various career pathways related to working with computers. Throughout the class, students will be introduced to computers, including their history, hardware, operating systems, system support, programming languages, software, databases, networking, data storage, and system security. During this course, the student will perform essential IT tasks commonly performed by end-users and entry-level IT professionals.

Objectives:

- Identify the major components of a computer and understand their function.
- Compare and contrast the differences between various operating systems.
- · Demonstrate an understanding of basic principles of software and database development.
- · Identify foundational terms used in computing.
- Identify security issues affecting the use of computers and networks.

TEIT 1040 Introduction to Virtualization

30 Clock-Hours

Introduction to Virtualization explores what virtualization is and the critical role it plays in IT. Learn how to install, configure, and maintain virtual machines as well as the availability, applications, and virtual appliances, including their role in virtualization.

- Explore virtualization and the benefits gained from a virtual environment.
- Demonstrate how to enable virtualization on a host system.
- Install operating systems on virtual machines.
- Import/Export virtual machines for use in different virtualization platforms.
- Configure basic processing, memory, storage, and networking in a virtual environment.
- Demonstrate how to copy, backup, and restore virtual machines.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1400 Introduction to Cloud

60 Clock-Hours

Introduction to Cloud provides instruction on core cloud computing concepts, services, and solutions as well as foundational knowledge from a business value perspective of the benefits and considerations for cloud computing implementation. Included is an overview of popular cloud platforms.

Objectives:

- Define the value proposition of cloud computing.
- Identify core cloud concepts, services, solutions, and management tools.
- Demonstrate an understanding of cloud security considerations, features, and best practices.
- · Describe cloud identity, governance, privacy, and compliance concepts and features.
- Compare and contrast cloud pricing models and identify cost management solutions.
- Define cloud deployment models, methods, and operations.

TEIT 1500 Introduction to Scripting

30 Clock-Hours

Introduction to Scripting provides instruction on basic scripting concepts. Students are introduced to scripting fundamentals to automate tasks that would otherwise be performed manually. Students explore the practical use and management of scripts to perform system administration functions.

Objectives:

- Demonstrate an understanding of the features of scripting languages.
- Implement critical thinking and problem-solving skills through practical exercises.
- Perform automation of systems tasks and functions.

TEIT 1660 Server + 120 Clock-Hours

This course will focus on server hardware and software installation and management, server administration, security and disaster recovery, and Troubleshooting. This course is built around hands-on labs to facilitate a complete learning experience in preparation to take the Server+ CompTIA Certification. Server concepts in all the major operating systems (Mac OS, Windows, and Linux) will be covered in this course.

- Build, maintain, troubleshoot, secure and support server hardware and software technologies, including virtualization.
- · Identify environmental issues.
- Explain disaster recovery and general security procedures.
- · Identify industry terminology and concepts.
- · Discuss server roles and their interaction in a dynamic computing environment.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1670 Windows Administration

120 Clock-Hours

This course will focus on server hardware and software installation and management, server administration, security and disaster recovery, and Troubleshooting. This course is built around hands-on labs to facilitate a complete learning experience in preparation to take the Server+ CompTIA Certification. Server concepts in all the major operating systems (Mac OS, Windows, and Linux) will be covered in this course.

Objectives:

- Build, maintain, troubleshoot, secure and support server hardware and software technologies, including virtualization.
- · Identify environmental issues.
- Explain disaster recovery and general security procedures.
- · Identify industry terminology and concepts.
- Discuss server roles and their interaction in a dynamic computing environment.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

TEIT 1820 Certification Test Prep III

30 Clock-Hours

Certification Test Prep III provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1830 Certification Test Prep IV

30 Clock-Hours

Certification Test Prep IV provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1840 Certification Test Prep V

30 Clock-Hours

Certification Test Prep V provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

TEIT 1850 Certification Test Prep VI

30 Clock-Hours

Certification Test Prep VI provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 2140 Network Traffic Analysis

30 Clock-Hours

This course provides instruction on the fundamental basics of network traffic analysis. This course will cover the process of recording, reviewing, and analyzing network traffic for performance, security and/or general network operations and management.

- · Describe and evaluate network utilization.
- Record, filter and analyze different types of network traffic.
- Demonstrate use of network analysis tools.
- Identify types of network connections.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 2200 Security + 120 Clock-Hours

Security+ provides instruction on assessing the security posture of enterprise environments and implementing appropriate security solutions. Instruction is given to identify, analyze, and respond to events and incidents. This course aligns with the objectives of the CompTIA Security+ certification exam.

Objectives:

- Explain security functions and purposes as they relate to network devices.
- Identify and implement risk mitigation techniques and strategies.
- Distinguish and evaluate different network and physical security threats.
- Implement network intrusion detection and prevention technologies.
- Identify and execute appropriate cryptography measures.

TEIT 2250 Ethical Hacking

90 Clock-Hours

Ethical Hacking teaches fundamental network attack strategies and countermeasures. Students learn to use various penetration testing tools to analyze network vulnerabilities and how to counter them and improve network security. This course aligns with the Certified Ethical Hacker (CEH) objectives.

Objectives:

- Perform: reconnaissance, scanning, and enumeration.
- Demonstrate Access: Obtain login credentials, administrative access and escalate privileges, access by cracking.
- Perform Attacks: Perform passive and active online attacks and infrastructure attacks.
- Demonstrate Defense Techniques: Defend systems and devices, implement defensive systems, scan for vulnerabilities.

TEIT 2270 Cybersecurity Analysis

90 Clock-Hours

Cybersecurity Analysis teaches threat and vulnerability management and how to employ tools and methods to secure data and infrastructure and respond to security incidents. The CompTIA CySA+ objectives are covered and serves as a foundation for advanced security credentials.

Objectives:

- Implement appropriate tools and methods to perform a reconnaissance of a system or network.
- Gather data and analyze the results of a reconnaissance.
- Describe and implement techniques and procedures needed to secure an organization.
- Classify threat data or activities for their impact on a security incident.
- · Manage incident response, recovery, and reporting

TEIT 2300 Linux + 90 Clock-Hours

Linux + provides instructions on how to install, configure, manage, and maintain a Linux server. Topics include: SSH, VNC, Webmin, NIS and LDAP. Students learn to install, configure, and administer a Linux server. This course aligns with the CompTIA Linux + objectives.

- Configure the Linux file systems.
- · Configure file sharing services.
- · Configure network services.
- Demonstrate competency with Linux Administration Tools.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 2900 IT Externship

90 Clock-Hours

Students will have the opportunity to develop real-world work experiences using knowledge and skills they have obtained in the program. Students will gain practical application of classroom skills through actual work situations. IT projects will be assigned to the student by cooperative businesses. Students will receive objective feedback on their performance each month. Customized student learning objectives will be developed addressing the individual needs of the organization and career interests of each student by the cooperative business and the student.

Objectives:

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- · Demonstrate ability to work independently.
- Demonstrate ability to receive constructive criticism.
- Write cooperatively with faculty and agency to create personalized objectives to be accomplished during the internship.

TEIT 2910 Special Projects I

30 Clock-Hours

Special Projects I provides students with a unique or advanced skill development identified as a need in industry. Students will select their chosen topic from a previous course subject and draft a project proposal. After the project is completed, the student and faculty member will review the success of the project compared to the proposal. (Requires advisor approval).

Objectives:

- · Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Create a draft proposal for a project focusing on networking, cybersecurity, or operating systems.
- Develop a project outline that defines the purpose, scope, and potential challenges they may face. Present the outline to faculty for approval.
- Demonstrate project management skills as they complete their project and work with the instructor to evaluate its success according to their purpose, scope, and outline.

TEIT 2920 Special Projects II

60 Clock-Hours

Special Projects II provides students with a unique or advanced skill development identified as a need in industry. Students will select their chosen topic from a previous course subject and draft a project proposal. After the project is completed, the student and faculty member will review the success of the project compared to the proposal. (Requires advisor approval).

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Create a draft proposal for a project focusing on networking, cybersecurity, or operating systems.
- Develop a project outline that defines the purpose, scope, and potential challenges they may face. Present the outline to faculty for approval.
- Demonstrate project management skills as they complete their project and work with the instructor to evaluate its success according to their purpose, scope, and outline.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 2930 Special Projects III

90 Clock-Hours

Special Projects III provides students with a unique or advanced skill development identified as a need in industry. Students will select their chosen topic from a previous course subject and draft a project proposal. After the project is completed, the student and faculty member will review the success of the project compared to the proposal. (Requires advisor approval).

Objectives:

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Create a draft proposal for a project focusing on networking, cybersecurity, or operating systems.
- Develop a project outline that defines the purpose, scope, and potential challenges they may face. Present the outline to faculty for approval.
- Demonstrate project management skills as they complete their project and work with the instructor to evaluate its success according to their purpose, scope, and outline.

TEIT 1943 Intermediate Service Desk

90 Clock-Hours

This course provides a hands-on service desk experience where students will complete activities that will hone the customer service, documentation, and troubleshooting skills needed to obtain a position as a service desk professional. This course also provides multiple opportunities to complete real world tickets as part of our free community computer support service desk.

Objectives:

- Explain the common tasks associated with the service desk.
- Use best practice techniques with customers.
- Research and present information to customers.
- · Create troubleshooting tools.
- · Use common troubleshooting steps.
- Build clean Windows images for installation.
- · Perform basic Active Directory tasks.
- Complete Service Desk tickets for family, friends, and the community.

TEIT 1110 Introduction to Cybersecurity

30 Clock-Hours

This course will provide foundational cybersecurity knowledge in preparation for more advanced cybersecurity courses as well as an introduction to career prospects in cybersecurity.

- · Identify various types of security software.
- Demonstrate the use of software to mitigate risk in a lab environment.
- · Define security best practices.
- · Analyze various software logs.
- · Summarize major risk frameworks.
- · Identify social engineering techniques.
- Identify accurate and trustworthy security news sources.
- Explore career opportunities in cybersecurity.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

Salt Lake Community Collete

TEIT 1110 Introduction to Cybersecurity

30 Clock-Hours

This course will provide foundational cybersecurity knowledge in preparation for more advanced cybersecurity courses as well as an introduction to career prospects in cybersecurity.

Objectives:

- · Identify various types of security software.
- Demonstrate the use of software to mitigate risk in a lab environment.
- · Define security best practices.
- · Analyze various software logs.
- · Summarize major risk frameworks.
- · Identify social engineering techniques.
- · Identify accurate and trustworthy security news sources.
- Explore career opportunities in cybersecurity.

TEIT 1400 Introduction to Cloud

60 Clock-Hours

Introduction to Cloud provides instruction on core cloud computing concepts, services, and solutions as well as foundational knowledge from a business value perspective of the benefits and considerations for cloud computing implementation. Included is an overview of popular cloud platforms.

Objectives:

- Define the value proposition of cloud computing.
- Identify core cloud concepts, services, solutions, and management tools.
- Demonstrate an understanding of cloud security considerations, features, and best practices.
- · Describe cloud identity, governance, privacy, and compliance concepts and features.
- Compare and contrast cloud pricing models and identify cost management solutions.
- Define cloud deployment models, methods, and operations.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 2200 Security + 120 Clock-Hours

Security+ provides instruction on assessing the security posture of enterprise environments and implementing appropriate security solutions. Instruction is given to identify, analyze, and respond to events and incidents. This course aligns with the objectives of the CompTIA Security+ certification exam.

Objectives:

- Explain security functions and purposes as they relate to network devices.
- · Identify and implement risk mitigation techniques and strategies.
- Distinguish and evaluate different network and physical security threats.
- Implement network intrusion detection and prevention technologies.
- Identify and execute appropriate cryptography measures.

Southwest Technical College

TEIT 2200 Security + 120 Clock-Hours

Security+ provides instruction on assessing the security posture of enterprise environments and implementing appropriate security solutions. Instruction is given to identify, analyze, and respond to events and incidents. This course aligns with the objectives of the CompTIA Security+ certification exam.

Objectives:

- Explain security functions and purposes as they relate to network devices.
- Identify and implement risk mitigation techniques and strategies.
- Distinguish and evaluate different network and physical security threats.
- Implement network intrusion detection and prevention technologies.
- · Identify and execute appropriate cryptography measures.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 2900 IT Externship

90 Clock-Hours

Students will have the opportunity to develop real-world work experiences using knowledge and skills they have obtained in the program. Students will gain practical application of classroom skills through actual work situations. IT projects will be assigned to the student by cooperative businesses. Students will receive objective feedback on their performance each month. Customized student learning objectives will be developed addressing the individual needs of the organization and career interests of each student by the cooperative business and the student.

Objectives:

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Demonstrate ability to work independently.
- Demonstrate ability to receive constructive criticism.
- Write cooperatively with faculty and agency to create personalized objectives to be accomplished during the internship.

TEIT 2920 Special Projects II

60 Clock-Hours

Special Projects II provides students with a unique or advanced skill development identified as a need in industry. Students will select their chosen topic from a previous course subject and draft a project proposal. After the project is completed, the student and faculty member will review the success of the project compared to the proposal. (Requires advisor approval).

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Create a draft proposal for a project focusing on networking, cybersecurity, or operating systems.
- Develop a project outline that defines the purpose, scope, and potential challenges they may face. Present the outline to faculty for approval.
- Demonstrate project management skills as they complete their project and work with the instructor to evaluate its success according to their purpose, scope, and outline.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

Tooele Technical College

TEIT 2200 Security + 120 Clock-Hours

Security+ provides instruction on assessing the security posture of enterprise environments and implementing appropriate security solutions. Instruction is given to identify, analyze, and respond to events and incidents. This course aligns with the objectives of the CompTIA Security+ certification exam.

Objectives:

- Explain security functions and purposes as they relate to network devices.
- Identify and implement risk mitigation techniques and strategies.
- Distinguish and evaluate different network and physical security threats.
- Implement network intrusion detection and prevention technologies.
- · Identify and execute appropriate cryptography measures.

TEIT 1400 Introduction to Cloud

60 Clock-Hours

Introduction to Cloud provides instruction on core cloud computing concepts, services, and solutions as well as foundational knowledge from a business value perspective of the benefits and considerations for cloud computing implementation. Included is an overview of popular cloud platforms.

Objectives:

- Define the value proposition of cloud computing.
- Identify core cloud concepts, services, solutions, and management tools.
- Demonstrate an understanding of cloud security considerations, features, and best practices.
- · Describe cloud identity, governance, privacy, and compliance concepts and features.
- Compare and contrast cloud pricing models and identify cost management solutions.
- Define cloud deployment models, methods, and operations.

TEIT 1500 Introduction to Scripting

30 Clock-Hours

Introduction to Scripting provides instruction on basic scripting concepts. Students are introduced to scripting fundamentals to automate tasks that would otherwise be performed manually. Students explore the practical use and management of scripts to perform system administration functions.

Objectives:

- Demonstrate an understanding of the features of scripting languages.
- Implement critical thinking and problem-solving skills through practical exercises.
- Perform automation of systems tasks and functions.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1820 Certification Test Prep III

30 Clock-Hours

Certification Test Prep III provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

TEIT 1830 Certification Test Prep IV

30 Clock-Hours

Certification Test Prep IV provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1840 Certification Test Prep V

30 Clock-Hours

Certification Test Prep V provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1850 Certification Test Prep VI

30 Clock-Hours

Certification Test Prep VI provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 2910 Special Projects I

30 Clock-Hours

Special Projects I provides students with a unique or advanced skill development identified as a need in industry. Students will select their chosen topic from a previous course subject and draft a project proposal. After the project is completed, the student and faculty member will review the success of the project compared to the proposal. (Requires advisor approval).

Objectives:

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Create a draft proposal for a project focusing on networking, cybersecurity, or operating systems.
- Develop a project outline that defines the purpose, scope, and potential challenges they may face. Present the outline to faculty for approval.
- Demonstrate project management skills as they complete their project and work with the instructor to evaluate its success according to their purpose, scope, and outline.

TEIT 2920 Special Projects II

60 Clock-Hours

Special Projects II provides students with a unique or advanced skill development identified as a need in industry. Students will select their chosen topic from a previous course subject and draft a project proposal. After the project is completed, the student and faculty member will review the success of the project compared to the proposal. (Requires advisor approval).

- · Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Create a draft proposal for a project focusing on networking, cybersecurity, or operating systems.
- Develop a project outline that defines the purpose, scope, and potential challenges they may face. Present the outline to faculty for approval.
- Demonstrate project management skills as they complete their project and work with the instructor to evaluate its success according to their purpose, scope, and outline.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 2930 Special Projects III

90 Clock-Hours

Special Projects III provides students with a unique or advanced skill development identified as a need in industry. Students will select their chosen topic from a previous course subject and draft a project proposal. After the project is completed, the student and faculty member will review the success of the project compared to the proposal. (Requires advisor approval).

Objectives:

- Apply decision-making, critical-thinking, troubleshooting, and problem-solving skills.
- Create a draft proposal for a project focusing on networking, cybersecurity, or operating systems.
- Develop a project outline that defines the purpose, scope, and potential challenges they may face. Present the outline to faculty for approval.
- Demonstrate project management skills as they complete their project and work with the instructor to evaluate its success according to their purpose, scope, and outline.

Uintah Basin Technical College

TEIT 1500 Introduction to Scripting

30 Clock-Hours

Introduction to Scripting provides instruction on basic scripting concepts. Students are introduced to scripting fundamentals to automate tasks that would otherwise be performed manually. Students explore the practical use and management of scripts to perform system administration functions.

Objectives:

- Demonstrate an understanding of the features of scripting languages.
- Implement critical thinking and problem-solving skills through practical exercises.
- Perform automation of systems tasks and functions.

TEIT 1800 Certification Test Prep I

30 Clock-Hours

Certification Test Prep I provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1810 Certification Test Prep II

30 Clock-Hours

Certification Test Prep II provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

Utah System of Higher Education

Information Technology FY2024 / (600 Clock-Hours)

TEIT 1820 Certification Test Prep III

30 Clock-Hours

Certification Test Prep III provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1830 Certification Test Prep IV

30 Clock-Hours

Certification Test Prep IV provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.

TEIT 1840 Certification Test Prep V

30 Clock-Hours

Certification Test Prep V provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

Objectives:

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- · Demonstrate proficiency in test-taking strategies.
- Schedule and take the certification exam.

TEIT 1850 Certification Test Prep VI

30 Clock-Hours

Certification Test Prep VI provides instruction in preparation for industry exams. Students will access additional testing materials and resources for their exam preparation. Students will review the exam outline, objectives, grading scale, requirements, and recommendations for the specified industry exam.

- Identify areas for improvement of certification learning objectives.
- Demonstrate competency by passing practice tests.
- Demonstrate proficiency in test-taking strategies.
- · Schedule and take the certification exam.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 2106 Technical Installation

60 Clock-Hours

This course will focus on combining technical skills with light construction. Students will learn how to install and configure physical network infrastructure, security and door access, and smart home technologies. This course will provide instruction in the use of small construction tools including stud finders, cordless drills, saws etc. This course covers the basics of low-voltage technician skills. Students will also learn basic electronic soldering skills.

Objectives:

- Demonstrate the use of basic network and construction tools.
- Successfully install and configure smart home technologies, security devices, and network infrastructure.
- Explain basic low-voltage electrical theory.

TEIT 1910 Telecommunications

60 Clock-Hours

This course will focus on the telecommunications equipment that supports the backbone of the modern internet. Students will learn how to install, program, and maintain edge routers, MSPP's (MultiService Provisioning Platform), ODXC (Optical Digital Cross Connect), and other communication devices. They will also learn how to create and implement emergency power backup plans.

Objectives:

- · Identify common communication cables.
- Demonstrate best practices when running cables and cable management.
- Program common communication devices
- Identify vulnerabilities in the network and implement security measures.
- Create and implement an emergency power backup plan.

Utah State University - Eastern

TEIT 1041 Introduction to Programming

90 Clock-Hours

This course introduces computer programming/software engineering and applications. Students learn the fundamentals of computer programming, simple controls and data structures, and operating system commands. Students learn to design, code, and test their own programs, and apply mathematical skills.

- · Modify existing Python programs.
- · Write original Python programs.
- Demonstrate the use of:
- o Different data types and variables.
- o Decision structures such as If and If-elif-else.
- o Loops structures such as While, and For functions.
- o Lists, Tuples, Dictionaries and Sets.
- o String manipulations.
- o Files (read and write).
- o Classes and Object-Oriented Programming.



Information Technology FY2024 / (600 Clock-Hours)

TEIT 1310 Website Design

90 Clock-Hours

This course focuses on design and construction of Web pages using HTML, Cascading Style Sheets, and JavaScript. Students will have hands-on experience creating and publishing web pages. This course also focuses on basics of hosting, publishing, promoting, and maintaining websites.

Objectives:

- Understand web hosting and critique website designs.
- Demonstrate use of HTML5 and Cascading Style Sheets (CSS) in developing web pages.
- Develop web pages using images, multimedia, tables, and forms.
- · Apply basic JavaScripting to web pages.
- · Publish, Promote, and Maintain a website.
- Evaluate and use Website Builders or Content Management Systems (CMS).

TEIT 2500 Web Business 90 Clock-Hours

This course is an introduction to Web-based business. Students will learn business concepts relating to on-line and world-wide e-commerce. Also marketing concepts, design strategies, and technical issues as they relate to Web-based businesses will be discussed.

Objectives:

- Review technology infrastructure of the Internet and the World Wide Web.
- Understand the implications of selling on the web regional and worldwide.
- Develop marketing concepts on the web in conjunction with social media, mobile, and online auctions.
- Explain how to improve efficiency and reduce costs.
- Discuss the environment of electronic commerce involving ethical, legal, and tax Issues.
- Explain web server hardware and software, electronic commerce software and associated security needs.
- Plan for electronic commerce including the implementation of payment systems that are commonly used.

TEBP 1200 Professionalism

90 Clock-Hours

Professionalism explores behaviors, attitudes, and human skills essential for workplace success. Students will study how to build strong customer relations and provide outstanding customer service in a diverse workplace. Students will use professional skills to prepare for potential career opportunities.

- Explain the importance of human skills for success in the workplace.
- Explore the foundations of a service culture and develop relationship management skills.
- Demonstrate preparedness for potential career opportunities.
- Practice acceptable workplace conduct, including self-management, willingness to learn, and workplace relationships.