

Computer Technology Systems

The computer technology department of WVC offers training programs for computer support technicians, security specialists, network administrators and network engineers. By completing coursework in the computer technology series, students can prepare for several industry-recognized certifications including CompTIA A+, Comp TIA Network+, Linux and Microsoft Certified Systems Administrator (MCSA). Computer programming classes are offered in Java, Javascript, HTML, PHP and MySQL.

Computer Technology Systems Degrees and Certificates

- Computer Technology Systems

Computer Technology Systems Classes

CTS 105: Survey of Networking

Networking for non-CTS majors or students seeking additional background on networking. Introduces the basics of networking, such as peer-to-peer, LANs, and WANs. Discover the history behind networking and how people use networking in the real world. Understand how computers share information. Learn the vocabulary of networking- understand the terms, abbreviations and acronyms.

Credits 3

Weekly Contact Hours 3

Meets Degree Requirements For
Restricted Elective

CTS 110: Computer Hardware

Computer hardware troubleshooting. Designed to help prepare students for industry certifications as well as provide practical hands-on experience.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 115: Computer Software

Fundamentals of supporting and troubleshooting computer operating systems. Prepare to pass CompTIA's A+ OS certification exam. Covers a wide range of material about operating systems, from using the different Windows operating systems to demonstrating how the boot process works, as well as installing, supporting and troubleshooting the different Windows operating systems.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 120: Introduction to Networking

Beginning course in data networks. Emphasis is placed on the OSI model and discovery of modern data network design. Learn the functions and appropriate use of network hardware, software and protocols. Helps prepare students to pass CompTIA's Network+ certification exam.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 130: Client Operating Systems

Familiarizes students with client operating systems (Windows, Linux, Mac OS platforms) with emphasis on connectivity, troubleshooting and architectural models. Gain hands-on experience in the process of installing and configuring network clients.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 135: Client/Server Operating Systems

Familiarizes students with client and server operating systems (Windows client and Windows Server) with emphasis on connectivity, troubleshooting and architectural models. Gain hands-on experience in the process of installing and configuring network clients and server OS.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 140: Server Operating Systems

Introduces students to the fundamentals of planning, implementing, managing and troubleshooting network servers in a modern LAN environment. Topics include connectivity, security, maintenance and disaster planning/recovery. Students will install and configure windows server.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 150: Network Infrastructure

Prepares students for industry certification exams. Learn to manage and maintain a Windows server environment. Provides an overview of networking, IP addressing basics, configuring a network interface, implementing Dynamic Host Configuration Protocol (DHCP), managing and monitoring DHCP and DNS.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For

Restricted Elective

Prerequisites

[CTS 140](#) or Instructor Permission

CTS 160: Active Directory

Introduces Active Directory and prepares students to plan, configure and administer Active Directory infrastructure. Learn how to configure the Domain Name System (DNS) to manage name resolution, schema and replication and how to use Active Directory to centrally manage a network.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For

Restricted Elective

Prerequisites

[CTS 140](#) or Instructor Permission

CTS 195: Technology Seminar

Regularly scheduled seminar covering contemporary news and issues dealing with technology. May be repeated with different topics.

Credits 2

Weekly Contact Hours 2

Meets Degree Requirements For

Restricted Elective

CTS 196: Cooperative Work Experience

Cooperative work experience is intended to provide authentic experiences in the world of work by applying knowledge and skills learned in the classroom to a working environment. A summary portfolio of learned experiences will document the specific abilities gained through working cooperatively in a business.

Credits 1-5

Weekly Contact Hours 25

Meets Degree Requirements For

Restricted Elective

CTS 221: Introduction to Linux

Provides a comprehensive overview of the Linux operating system. Become familiar with the Linux command-line environment, utilities and applications, as well as the graphical X Window environment.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For

Restricted Elective

CTS 222: Security Fundamentals

In this introductory course in network security, learn security fundamentals. Includes identification of security issues in modern networks and how to design a network to avoid security problems. Helps students prepare for the CompTIA Security+ Certificate.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 225: Web Server Management

Training in setting up, managing, securing and troubleshooting web servers in both Windows and Linux environments.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

Prerequisites

[CTS 140](#) or Instructor Permission

CTS 231: Intermediate Linux

Provides a comprehensive overview of the Linux operating system. Become familiar with the Linux command-line environment, utilities and applications, as well as the graphical X Window environment. Perform more advanced Linux tasks. Learn how to manage and set up a web server, LAMP installation and Command Line operations.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

CTS 232: Network Design

Advanced course that covers LAN/WAN Network design issues.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

Prerequisites

[CTS 150](#) and [CTS 160](#) or Instructor Permission

CTS 235: Managing Mail and News Servers

Covers a wide range of material about email servers, from installation, configuration, administration, troubleshooting, and maintenance.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

Prerequisites

[CTS 140](#) and [CTS 150](#) and CST 160 or Instructor Permission

CTS 295: Technology Seminar

Regularly scheduled seminar covering contemporary news and issues dealing with technology. May be repeated with different topics.

Credits 2

Weekly Contact Hours 2

Meets Degree Requirements For
Restricted Elective

CTS 296: Cooperative Work Experience

Cooperative work experience is intended to provide authentic experiences in the world of work by applying knowledge and skills learned in the classroom to a working environment. A summary portfolio of learned experiences will document the specific abilities gained through working cooperatively in a business.

Credits 1-5

Weekly Contact Hours 25

Meets Degree Requirements For
Restricted Elective