

# Computer Technology Systems

## Degree Type

Certificate of Completion

Associate of Technical Science Degree

- **Associate of Technical Science Degree in Network Administration**
- **Data Center/IT Support Technician - Certificate of Completion**

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.

The WVC Computer Technology Center is located in library. The computer labs feature up-to-date equipment that is configured to allow students to perform a variety of programming and networking exercises such as configuring a domain controller, network security, routing or setting up a web server.

Core program courses may have prerequisite requirements. English and mathematics courses require qualifying placement score or acceptable preparatory coursework on those subjects. See course description for details.

For more information about graduation rates, the median debt of students who completed the program and other important information, visit [www.wvc.edu/computertech](http://www.wvc.edu/computertech).

## Suggested Course Sequence: Associate of Technical Science Degree in Computer Technology - Network Administration

*Offered on the Wenatchee campus*

Total Credits	90
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### Course Sequencing

## First Year - First Quarter

Course ID	Title	Credits
CTS 110	Computer Hardware	5.0
CTS 115	Computer Software	5.0
CTS 120	Introduction to Networking	5.0

## First Year - Winter Quarter

Course ID	Title	Credits
CTS 130	Client Operating Systems	5.0
CTS 140	Server Operating Systems	5.0
	Support Course *	3.0-5.0

## First Year - Spring Quarter

Course ID	Title	Credits
CTS 150	Network Infrastructure	5.0
CTS 160	Active Directory	5.0
	Elective	5.0

**Total Credits for Data Center/IT Support Technician - Certificate of Completion: 43-45**

## Second Year - Fall Quarter

Course ID	Title	Credits
CTS 222	Security Fundamentals	5.0
CSC& 141	Programming Fundamentals	5.0
	Support Course *	5.0

## Second Year - Winter Quarter

Course ID	Title	Credits
CTS 221	Introduction to Linux	5.0
CTS 232	Network Design	5.0
	Elective	5.0

## Second Year - Spring Quarter

Course ID	Title	Credits
CTS 225	Web Server Management	5.0
CTS 235	Managing Mail and News Servers	5.0
	Elective (may use CTS 196/Internship)	5.0

\*Support courses - These classes need to be completed to qualify for the Data Center/IT Support Technician - Certificate of Completion certificate or two-year degree: ENGL& 101\*\*, MATH 99\*\* or higher, and one of the following: BCT 116 or CMST& 210 or CMST& 220. The ATS degree also requires 10-12 credits of electives to reach a total of 90 credits.

\*\*Placement score required

## Program outcomes

Students who complete the Data Center/IT Support Technician - Certificate of Completion should be able to:

- Work effectively, both independently and in groups, to solve computer hardware issues.
- Work effectively, both independently and in groups, to solve computer software and operating system issues.
- Diagnose and troubleshoot a variety of networking issues, from the physical layer through the application layer.
- Install, configure and troubleshoot a variety of client and server platform operating systems.
- Configure and support networks in a peer-to-peer network and a client server, domain-based network structure.
- Develop a foundation to continue their studies in computer technology and related fields.

In addition, students who complete the Associate of Technical Science Degree in Computer Technology-Network Administration should be able to:

- Recognize and work to prevent security issues such as viruses, denial of service attacks and attacks from both inside and outside a network perimeter.
- Install and configure advanced Network Operating Systems (NOS), including configuration of domain controllers, group policy, replication, file sharing and security.
- Administer networks: create user accounts and passwords; manage file permissions, user rights and security.
- Set up and configure a variety of roles for network operating systems, including file server, domain controller, web server, mail server, FTP server.
- Learn the fundamentals of open source operating systems such as Linux, including preparing for installation, dual-booting multiple operating systems, software installation fundamentals, configuration of network parameters and operation of server in various roles (web server, FTP server, file services).

## Support Course \*

**Elective Credits** 3.0-5.0

Support courses - These classes need to be completed to qualify for the computer technician certificate or two-year degree: ENGL& 101\*\*, MATH 99\*\* or higher, and one of the following: BCT 116 or CMST& 210 or CMST& 220. The ATS degree also requires 10-12 credits of electives to reach a total of 90 credits.

*\*\*Placement score required*

## Elective

**Elective Credits** 5.0

## Support Course \*

**Elective Credits** 5.0

Support courses - These classes need to be completed to qualify for the Data Center/IT Support Technician - Certificate or two-year degree: ENGL& 101\*\*, MATH 99\*\* or higher, and one of the following: BCT 116 or CMST& 210 or CMST& 220. The ATS degree also requires 10-12 credits of electives to reach a total of 90 credits.

*\*\*Placement score required*

## Elective (may use CTS 196/Internship)

**Elective Credits** 5.0