**Introduction to Networking**

**CTS 120 Wenatchee Valley College**

**Competency Profile**

**Course Objectives**

Knowing how to install, configure, and troubleshoot a computer network is a highly marketable and exciting skill. This course first introduces the fundamental building blocks that form a modern network, such as protocols, topologies, hardware, and network operating systems. It then provides in-depth coverage of the most important concepts in contemporary networking, such as TCP/IP, Ethernet, wireless transmission, and security. The course will prepare you to select the best network design, hardware, and software for your environment. You will also have the skills to build a network from scratch and maintain, upgrade, and troubleshoot an existing network. Finally, you will be well prepared to pass CompTIA’s (the Computing Technology Industry Association’s) Network+ certification exam.

**Core topics**

* An Introduction to Networking
* Networking Standards and the OSI Model
* Transmission Basics and Networking Media
* Introduction to TCP/IP Protocols
* Topologies and Ethernet Standards
* Network Hardware
* WANs and Remote Connectivity
* Wireless Networking
* Network Operating Systems
* In-Depth TCP/IP Networking
* Voice and Video Over IP
* Network Security
* Troubleshooting Network Problems
* Ensuring Integrity and Availability
* Network Management