

Course Description

This Hands-On course will cover PC Hardware and OS. Introduce students to the components and operations of a personal computer. Students would learn the functions of PC hardware and peripheral devices, assemble a PC, format a hard disk drive, and load several different Windows operating systems.

Also would include LAN/WAN and Basic TCP/IP . Provide an understanding of the complex issues of internetworking by offering an overview of physical and logical network topologies, routing, switching and interconnectivity. Also go over the use of networking protocols and how protocols function at each layer of the OSI reference model.

This course will then provide an understanding of Microsoft Windows 20XX Server and teach the participant how to install and maintain a Microsoft Windows 20XX Server and how to configure several advanced features such as WIN, DNS, and DHCP. Students need to learn an overview of the skills and knowledge necessary to implement, administer, manage, and maintain a Microsoft Windows Server network infrastructure.

Students Will Learn

- **Be able to install, connect, and troubleshoot the internal components of the PC.**
- **Be able to install and troubleshoot multiple Windows operating systems.**
- **Be able to install software applications and programs.**
- **Describe the basic functions of NICs, repeaters, bridges, routers, gateways and firewalls.**
- **Identify and describe each of the layers in the Open System Integration (OSI) model and the Transmission Control Protocol/Internet Protocol (TCP/IP) Protocol suite.**
- **Describe the structure, function and purpose of the IP address and various header formats such as TCP, UDP, IP, and IEEE 802.3.**
- **Compare and contrast various physical and logical topologies.**
- **Convert between the binary, decimal and hexadecimal numbering systems.**
- **Differentiate between client/server and peer-to-peer networking environments.**
- **Describe the structured wiring associated with various types of networks.**
- **Describe the steps involved in the routing process.**
- **Subnet an IP address for a given number of subnets and host devices.**
- **Describe the principles of address resolution methods.**
- **Understand the functions of the Windows 20XX Server application including how to establish users and groups, how to configure multiple domains, and how to establish network resource availability.**
- **Be able to install the Windows 20XX Server application including video drivers, sound drivers, and remote access services.**
- **Understand the proper use of the system administrator functions of the Windows 20XX server.**
- **Be able to perform interfacing functions to a TCP/IP network.**
- **And Much More...**

Target Audience

All technicians performing any data related duties such as VoIP, HSI services and IPTV. System administrator and system engineer candidates, technicians, or support personnel who are responsible for implementing, managing, and maintaining server networking technologies.

Delivery Method

Instructor-Led with numerous Hands-On labs and exercises.

Equipment Requirements

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

Course Length

5 Days