

10967AC

**Fundamentals of a
Windows Server
Infrastructure**

5 DAYS

Learn about the Fundamental building blocks that go into building a Windows Server infrastructure with Windows Server 2012. This five day course covers the basic skills and knowledge that are required in order to build a Windows Server Infrastructure. It covers networking architecture and topologies, security considerations and best practices as well as basic Windows Server administration skills and technologies such as Windows Server 2012 Installation, configuration, maintenance and performance. Within that it will also cover specific areas such as Active Directory Domain Services (AD DS), Domain Name Services (DNS), Storage and many others. This course is designed to provide foundational level knowledge needed to prepare students to start a career or cross train in Microsoft Windows Server technologies.

Module 1: Installing and Configuring Windows Server 2012

Windows Server Architecture
Installing Windows Server
Configuring Services
Configuring Devices and Device Drivers

Module 2: Implementing Storage in Windows Server

Identifying Storage Technologies
Managing Disks and Volumes
Fault Tolerance

Module 3: Understanding Network Infrastructure

Network Architecture Standards
Local Area Networking
Wide Area Networking
Wireless Networking
Connecting to the Internet
Remote Access

Module 4: Connecting Network Components

Understanding the OSI Model
Understanding Media Types
Understanding Adapters, Hubs, and Switches
Understanding Routing

Module 5: Implementing TCP/IP

Overview of TCP/IP
IPv4 Addressing
IPv6 Addressing

Module 6: Implementing Windows Server Roles

Role-Based Deployment
Deploying Role-Specific Services
Considerations for Provisioning Roles

Module 7: Implementing Active Directory

Introducing Active Directory Domain Services (AD DS)
Implementing AD DS
Managing Users, Groups, and Computers
Implementing Group Policy

Module 8: Implementing IT Security Layers

Overview of Defense-in-Depth
Physical Security
Internet Security

Module 9: Implementing Security in Windows Server

Overview of Windows Security
Securing Files and Folders
Implementing Encryption

Module 10: Implementing Network Security

Overview of Network Security
Implementing Firewalls
Internet Protocol Security (IPsec)

Module 11: Implementing Security Software

Client Software Protection Features
E-Mail Protection
Server Protection

Module 12: Monitoring Server Performance

Event Logging
Performance Monitoring

Module 13: Maintaining Windows Server

Troubleshooting Windows Server Startup
Server Availability and Data Recovery
Applying Updates to Windows Server
Troubleshooting Windows Server