

## **70-741 - Plan and Implement IPv4 and IPv6 Networks in Windows Server 2016**

**Modality:** Self-Paced Learning

**Duration:** 3.5 Hours

**SATV Value:**

**CLC:**

**NATU:**

**SUBSCRIPTION:** Learn, Master

### ***About this course:***

This is an intermediate difficulty level certification course, with approximately 3 and a half hours duration. This course will cover all the important facets of a network running this operating system. It will include all the concepts required for successfully passing the exam, namely, planning out and incorporating IPv4 and IPv6 addressing schemes, troubleshooting client and server connectivity to name resolution with the Domain Name System, and allotment of IP addresses through the usage of Dynamic Host Configuration Protocol. In this course, the different forms of remote access features will also be covered, which are supported in Windows Server 2016, such as Virtual Private Networks, the Web Application Proxy, and the DirectAccess alternative to remote access. Mainly, this course is catered for helping the students to prepare for the Microsoft 70-741: Networking with Windows Server 2016 certification exam.

On average, a Windows Server Administrator earns \$69,077 per annum.

### ***Learning objectives:***

The course has the following learning objectives:

- Formulating and incorporating IPv4 network
- Incorporating Dynamic Host Configuration Protocol (DHCP)
- Incorporating IPv6
- Incorporating Domain Name System (DNS)
- Incorporating and manage IP address management (IPAM)
- Formulating procedure for remote access
- Incorporating DirectAccess
- Incorporating virtual private networks (VPNs)
- Incorporating networking for branch offices
- Setting up advanced networking features
- Incorporating Software Defined Networking

### ***Audience:***

This course is designed for and is suitable for:

- Network administrators: those who want to gain further grip on their existing skills and get training about new networking technology changes and functionality in Windows Server 2016
- System or Infrastructure Administrators: those who have basic networking knowledge and want to attain fundamental and advanced networking knowledge and skills on Windows Server 2016

### ***Requirements:***

The course has some important requirements that should be fulfilled before starting:

- Having experience in operating Windows Server 2008 or Windows Server 2012
- Having experience in operating a Windows Server infrastructure enterprise environment
- Having core knowledge of the Open Systems Interconnection (OSI) model
- Understanding of core networking infrastructure components and technologies like cabling, routers, hubs, and switches
- Having know-how of networking topologies and structures like local area networks (LANs), wide area networks (WANs) and wireless networking
- Having fundamental knowledge of the TCP/IP protocol stack, addressing and name resolution
- Having experience and knowledge of Hyper-V and virtualization
- Having practical experience in operating the Windows client operating systems like, Windows 8.1 or Windows 10

### ***Suggested pre-taken courses:***

- Administering Windows Server 2012 - MOC On Demand (MS-20411)
- Configuring Advanced Windows Server 2012 Services - MOC On Demand (MS-20412)
- Windows Server 2016: Advanced Virtualization

### ***Course Outline:***

- Topic A - Plan and Implement IP Addressing Schemes for IPv4 Networks
- Topic B - Configuring IPv4 Hosts
- Topic C - Managing and Troubleshooting IPv4 Connectivity
- Topic D - Implementing IPv6 for Network Hosts
- Topic E - Implementing IPv6 Transitioning and Coexistence