

# **WINDOWS NETWORKING & ADMINISTRATION Training program**



**A TRAINING PROGRAM IS DESIGNED AND DEVELOPED BY CERTIFIED AND EXPERIENCED TRAINERS**

**This highly specialized and concentrated Program is ideally suited to following individuals who are:**

- **Fresh University Graduates and like to pursue a career in Computer's networking.**
- **Already working and interested to switch over to field in Networking.**
- **Already working in a Networking position and like to excel in terms of better position and compensation.**
- **Already working in a Network Position in Companies and want to get the certification in International market.**

**Program is offered by: 3D Educators – Trainers & Consultants**

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**3D EDUCATORS**

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**TRAINERS & CONSULTANTS**

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# Program Details

## Inauguration

The Training Program will be inaugurated by a senior member of 3DEducators

## Program Structure

Number of classes in a week	Three Class Per Week
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Duration of each class	2 - Hour
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## Other Learning Activities:

Classroom Assignments	2
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Presentations by Trainees	2
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## **About the Program Designer & Instructor**

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The Profile of Program Designers & Instructors is given below:

The “**WINDOWS NETWORKING AND ADMINISTRATION**” Program has been designed and will be conducted the Senior Network Administrator who has ten years experience in Computer Networking and Administration.

The Person are qualified and certified in Networking and MCS and MBA.

At present, faculty is working with FMCG in a senior position, also involved in training and development for last ten years.

**3D EDUCATORS**

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**TRAINERS & CONSULTANTS**

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## COURSE CONTENTS

### WINDOWS NETWORKING

- Introduction to computer networks
  - History of computer network
  - Types & classification of computer network
    - LAN
    - MAN
    - WAN
  - Introduction to Network Technology & Type of Network Topology
    - Bus Topology
    - Ring Topology
    - Star Topology
  - Introduction to Communication & Type of Communication
    - Synchronous & Asynchronous Communication
  - Introduction to Communication Medium
    - Coaxial Cable (Thick & Thin Net)
    - Twisted Pair Cable (UTP & STP)
    - Fiber Optic Cable
  - Introduction to Transferring Modes
    - Simplex
    - Half Duplex
    - Full Duplex
  - Modes of Transmission
    - Analog Transmission
    - Digital Transmission
  - Cabling Microsoft & Cisco Standard
    - Straight Cable
    - Cross Cable
    - Rollover Cable
  - Introduction to Network Equipments
    - Hubs
    - Switches
    - Bridges
    - Routers
  - OSI Reference Model
    - Application Layer
    - Presentation Layer
    - Session Layer
    - Transport Layer
    - Network Layer
    - Data Link Layer
    - Physical Layer
  - Connection Less & Connection Oriented Protocol
- How Network Layers Communication
- Introduction to Microsoft Windows Operating System Family
    - The Microsoft Windows Family History
    - The Microsoft Server 2008 Family
    - The Microsoft Server 2003 Family
    - Logging on to Windows 2003
    - Installing and Configuration Administrative Tools

- **Managing Disk**
  - Preparing Disks
  - Managing Disk Properties
  - Managing Mounted Drives
  - Converting Disk
  - Creating Volumes
- **Introduction to Active Directory**
  - Active Directory Overview
  - Understanding Directory Services
  - Why have a Directory Services?
  - The Window Server 2003 Directory Service
  - Domain User Account Naming Conventions
  - Password Requirement and Guidelines
  - Creating User Accounts
  - Crating Domain User Accounts
  - Modifying Domain
- **UNDERSTANDING WINDOWS SERVER 2003 NETWORK**
  - Understanding Network Infrastructures
  - Networking with Default Components in Windows Server 2003
  - Extending a windows Server 2003 Network Infrastructures
- **Understanding TCP/IP**
  - Introduction to TCP/ IP
  - Understanding IP Addressing
  - Subnetting & Supernetting IP Networks
  - Installing & Configuring TCP/IP
- **Configuring DNS Server & Clints**
  - Understanding Name Resolution in Windows Server 2003
  - Understanding DNS in Windows Server 2003 Networks
  - Deploying DNS Servers
  - Configuring DNS Clients
- **Implementing a DNS Infrastructure**
  - Configuring DNS Server Properties
  - Configuring Zone Properties & Transfers
  - Configuring Advanced DNS Server Configuration
  - Creating Zone Delegation
  - Deploying Stub Zones
- **Configuring DHCP Server & Clint**
  - Introduction to DHCP Server
  - DHCP Process
  - Configuring the DHCP Server
  - Managing DHCP in Windows Networks
  - Configuring DHCP server to Perform DNS Updates
- **Configuring & Managing Remote Access & Routing**
  - Understanding Remote Access
  - Configuring Remote Access Connections
  - Authorizing Remote Access Connections
  - Implementing Dialup Server
  - Implementing VPNs
  - Deploying the Internet Authentication Services
  - Troubleshooting the Internet Authentication Services
- **Managing Network Security**
  - Introduction to Network Security Protocols
  - Implementing Secure Network Administration Procedures

- Understanding IPsec
- Monitoring Network Protocol security
- Troubleshooting Network Protocol Security
- **UNDERSTANDING WINDOWS SERVER 2008 NETWORK**
  - Installing windows server 2008
  - Managing server roles and features
  - Configuring Server Core and performing basic management task.
- **Understanding TCP/IP**
  - Introduction to TCP/ IP
  - Understanding IP Addressing
  - Subnetting & Supernetting IP Networks
  - Installing & Configuring TCP/IP
- **Configuring and Troubleshooting IPV6**
  - Overview of IPV6
  - Coexistence with IPv6
  - IPV6 Tunneling Technologies
  - Transitioning from IPv4 to IPv6
- **Configuring DNS Server & Clients**
  - Understanding Name Resolution in Windows Server 2008
  - Understanding DNS in Windows Server 2008 Networks
  - Deploying DNS Servers
  - Configuring DNS Clients
- **Configuring and Managing WINS**
  - Installing WINS
  - Configuring WINS replication.
  - Migrating from WINS to DNS
- **Implementing a DNS Infrastructure**
  - Configuring DNS Server Properties
  - Configuring Zone Properties & Transfers
  - Configuring Advanced DNS Server Configuration
  - Creating Zone Delegation
  - Deploying Stub Zones
- **Configuring DHCP Server & Client**
  - Introduction to DHCP Server
  - DHCP Process
  - Configuring the DHCP Server
  - Managing DHCP in Windows Networks
  - Configuring DHCP server to Perform DNS Updates
- **Configuring & Managing Remote Access & Routing**
  - Understanding Remote Access
  - Configuring Remote Access Connections
  - Authorizing Remote Access Connections
  - Implementing Dialup Server
  - Implementing VPNs
  - Deploying the Internet Authentication Services
  - Troubleshooting the Internet Authentication Services
- **Configuring Network Policy Server Roles**
  - Installing NPS
  - Configuring NPS Authentication methods
- **Configuring IP Sec**
  - Overview of IP sec
  - Configuring connection security rules.
- **Configuring and Managing 2008 Storage Management.**
  - Overview

- Using File Server Resource Manager
- Configuring Quota Management
- Managing Storage Report

## INTERNET SECURITY & ACCELERATION SERVER

- **Overview of Microsoft ISA Server**
  - Using Caching
  - Using Firewalls
  - Deployment Scenarios for ISA Server
- **Installing & Maintaining ISA Server**
  - Installing & Maintaining ISA Server
  - Installing & Configuring ISA Server Clients
- **Enabling Security - Enhanced Internet Access**
  - Accessing Policies & Rules Overview
  - Creating Policy Elements
  - Configuring Access Policies and Rules
  - Using ISA Server Authentication
  - Configuring Bandwidth Rules
- **Configuring Caching**
  - Cache Overview
  - Configuring Cache Policy & Cache Setting
  - Configuring Scheduled Contents Downloads
- **Configuring Access to Internet Resources**
  - Introduction to Publishing
  - Configuring Web Publishing
  - Configuring Server Publishing
  - Adding an H.323 Gatekeeper

## MS WINDOWS XP PROFESSIONAL

- **Installing, Configuring & Administering MS Windows XP Professional**
  - Planning an Installation of Microsoft Windows XP Professional
  - Installing Windows XP Professional from a product CD
  - Upgrading to Microsoft XP Professional
  - Transferring User Setting by using the USMT
  - Activating Windows XP Professional
  - Troubleshooting Failed Installations
- **Automating an Installation of Microsoft Windows XP Professional**
  - Introduction to Automating an Installation of Windows XP Professional
  - Creating Answer file
  - Creating Uniqueness Database File
  - How Setup uses Answer Files and UDFs
  - Performing an Automated Installation of Windows XP Professional
  - Introduction to Creating and Deploying an Image
  - Creating, Testing and Deploying an Image
  - Overview of Remote Installation Services
- **Configuring MS Windows XP Professional to Operate in MS Windows Networks**
  - Examining of Workgroups & User Account
  - Creating & Authenticating Local User Account
  - Configuring Local Security
  - Configuring Logon Option in a Workgroup

- Joining a Domain
- Operating in a Domain
- **Configuring MS Windows XP for Mobile Computing**
  - Configuring Hardware for Mobile Computing
  - Configuring Power Management Options for Mobile Computing
  - Making Files, Folders, and Web Pages Available for Offline Use
- **Monitoring Resources and Performance**
  - Determining System Information
  - Using Task Manager to Monitor System Performance
  - Using Performance & Maintenance Tools to Improve Performance
  - Monitoring Event Log
  - Configuring Program Compatibility
- **Troubleshooting the Boot Process and other System Issues**
  - Examining the Windows XP Professional boot Process
  - Controlling system setting During the Boot Process
  - Changing Startup Behavior Using the Boot.ini file
  - Using Advantage Boot Option to Troubleshoot System Problems
  - Using The Recovery Console to Start the Computer
- **Restoring a Computer to a Previous State**

## WINDOWS 7

- **Installing Windows 7 Professional**
  - Planning an Installation of Microsoft Windows 7 Professional
  - Installing Windows 7 Professional
  - Upgrading to Microsoft Windows 7 Professional
  - Activating Windows 7 Professional
  - Troubleshooting
- **Configuring MS Windows 7 Professional to Operate in MS Windows Networks**
  - Examining of Workgroups & User Account
  - Creating & Authenticating Local User Account
  - Configuring Local Security
  - Configuring Logon Option in a Workgroup
  - Joining a Domain
  - Operating in a Domain
- **Monitoring Resources and Performance**
  - Determining System Information
  - Using Task Manager to Monitor System Performance
  - Using Performance & Maintenance Tools to Improve Performance
  - Monitoring Event Log
  - Configuring Program Compatibility