MCSA Windows Server 2019 Certification Training Curriculum

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MCSA Windows Server 2019 Certification Training Curriculum

"Master Primary set of skills for Windows Server 2019 and learn to reduce IT costs and deliver more business value."

About Croma Campus:

Croma Campus Training & Development Private Limited is an education platform since 2010 providing rigorous industry-relevant programs designed and delivered in collaboration with world-class faculty and industry.

- Hands-On Live Projects
- Simulation Test Papers
- Industry Cases Studies
- 61,640+ Satisfied Learners
- 140+ Training Courses
- 100% Certification Passing Rate
- Live Instructor Classroom / Online Training
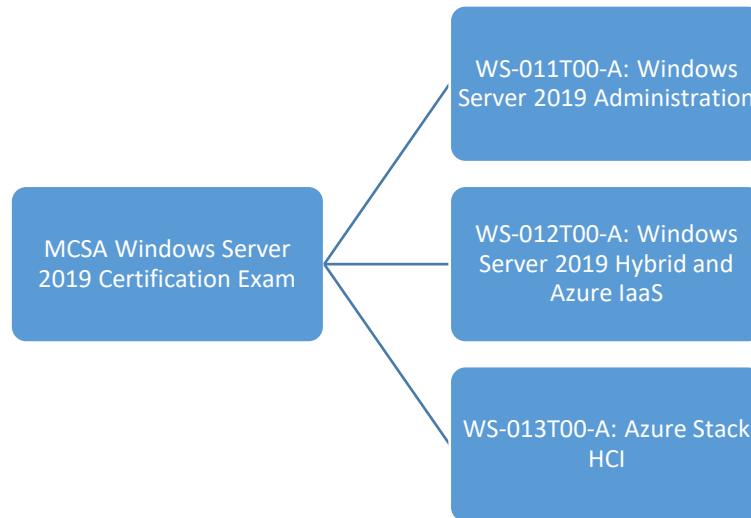- 100% Placement Assistance

Course Objectives:

- Development of Virtual Lab Environment: learning about computer-based activity for the interaction with an experimental apparatus.
- Development of Windows Server 2019 Domain with the PowerShell.
- Administration of Active Directory: learning about authentication and authorization of all users and computers for the assignment and enforcement of security policies.
- Administration of Server 2019.
- DHCP: learn about network management protocol for proper communication with other IP networks.
- Domain Naming System: learn about hierarchical and decentralized naming systems that apply to computers, related products, and services.
- Management of Disk: It enables users for the management of the disk drives. Besides, it also helps in learning about layout, status, capacity, type, file system, free space, and fault tolerance.
- Windows Deployment Services: learn about the deployment of Windows operating systems. It helps with the learning of the management of new clients.
- Understanding of the new features.
- Knowledge of the different Windows Server 2019 and the associated licensing options.
- Definition of the requirements of the Windows Server 2019 System.

Course Description:

MCSA Windows Server 2019 Certification validates your skills for the position as a network or computer systems administrator or computer network specialist. A Microsoft Certified Solutions Expert certification puts you at the top of the list for many different IT specialties. This certification focuses on the skills needed to manage and support clients and devices, Managing Servers in the enterprise Networks.

To earn **MCSA: Windows Server 2019** Associate certification, you have to clear these three Certifications one by one.

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                                        │  WS-011T00-A: Windows    │
                                        │  Server 2019             │
                                        │  Administration          │
                                        └──────────────────────────┘
┌──────────────────────────┐           ┌──────────────────────────┐
│  MCSA Windows Server      │───────────│  WS-012T00-A: Windows    │
│  2019 Certification Exam  │           │  Server 2019 Hybrid and  │
│                           │           │  Azure IaaS              │
└──────────────────────────┘           └──────────────────────────┘
                                        ┌──────────────────────────┐
                                        │  WS-013T00-A: Azure Stack│
                                        │  HCI                     │
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Croma Campus Training Program Deliverables:

- **Session Recordings** - Original Class Room Voice & Video Recording
- **Training Material** - Soft Copy Handbooks
- **Assignments** | Multiple Hands-on Exercises
- **Test Papers** - We provide **Practice Test** as part of our course to help you prepare for the actual certification exam.
- **Live Case Studies**
- **Live Projects** - Hands-on exercises and Project work. You will work on real time industry-oriented projects and assignments for each module to practice.
- **Key focus on Hands-on exercises and Project work**. You will work on real time industry-oriented projects.
- Faculty with more than **10+ Years of Experience** in the Industry.
- **Technical Resume Designing & Job Assistance:** With more than 100+ Clients across the Globe and we help learners to get a good job in their respective field. We also help learners with resume preparation.
- **Interview Q&A**
- **About Croma Campus Training Certificate:** Croma Campus will provide you with an industry-recognized (Certified by **ISO 9001:2015** & **E-Cell IIT Jodhpur**) course completion certificate which has lifelong validity.
- **How I Unlock my Croma Campus Certificate:** Attend Complete Batch & Submit at least One Completed Project.

A. WS-011T00-A: Windows Server 2019 Administration

Course Description:

This course is designed primarily for IT professionals who have some experience with Windows Server. It is designed for professionals who will be responsible for managing identity, networking, storage and compute by using Windows Server 2019, and who need to understand the scenarios, requirements, and options that are available and applicable to Windows Server 2019. The course teaches IT professionals the fundamental administration skills required to deploy and support Windows Server 2019 in most organizations.

Course Objectives:

- Use administrative techniques and tools in Windows Server 2019.
- Implement identity Services.
- Manage network infrastructure services.
- Configure file servers and storage.
- Manage virtual machines using Hyper-V virtualization and containers
- Implement high availability and disaster recovery solutions.
- Apply security features to protect critical resources.
- Configure Remote Desktop Services.

Course Content:

Module 1: Windows Server Administration Overview

- Overview of Windows Server administration principles and tools
- Introducing Windows Server 2019
- Windows Server Core Overview
- Module 2: Identity Services in Windows Server
- Overview of AD DS
- Deploying Windows Server domain controllers
- Overview of Azure AD
- Implementing Group Policy
- Overview of Active Directory Certificate Services

Module 3: Network Infrastructure services in Windows Server

- Deploying and managing DHCP
- Deploying and managing DNS services
- Deploying and managing IPAM

Module 4: File Servers and Storage management in Windows Server

- Volumes and file systems in Windows Server
- Implementing sharing in Windows Server
- Implementing Storage Spaces in Windows Server

- Implementing Data Deduplication
- Implementing iSCSI
- Deploying Distributed File System

Module 5: Hyper-V virtualization and containers in Windows Server

- Hyper-V in Windows Server
- Configuring VMs
- Securing virtualization in Windows Server
- Containers in Windows Server
- Overview of Kubernetes

Module 6: High Availability in Windows Server

- Planning for failover clustering implementation
- Creating and configuring failover cluster
- Overview of stretch clusters
- High availability and disaster recovery solutions with Hyper-V VMs

Module 7: Disaster recovery in Windows Server

- Hyper-V Replica
- Backup and restore infrastructure in Windows Server
- Module 8: Windows Server security
- Credentials and privileged access protection in Windows Server
- Hardening Windows Server
- Just Enough Administration in Windows Server
- Securing and analyzing SMB traffic
- Windows Server update management

Module 9: Remote Desktop Services in Windows Server

- Remote Desktop Services Overview
- Configuring a session-based desktop deployment
- Overview of personal and pooled virtual desktops

Module 10: Remote Access and Web Services in Windows Server

- Overview of RAS in Windows Server
- Implementing VPNs
- Implementing NPS
- Implementing Always On VPN
- Implementing Web Server in Windows Server

Module 11: Monitoring, Performance, and Troubleshooting

- Overview of Windows Server monitoring tools
- Using Performance Monitor
- Monitoring event logs for troubleshooting

Module 12: Upgrade and Migration in Windows Server

- AD DS migration
- Storage Migration Service
- Windows Server Migration Tools

B. WS-012T00-A: Windows Server 2019 Hybrid and Azure IaaS

Course Description:

This course is intended primarily for IT Professionals who have experience with managing an on-premises Windows Server environment. Its purpose is to prepare professionals for planning, implementing, and managing environments that include Azure IaaS-hosted Windows Server-based workloads. The course covers how to leverage the hybrid capabilities of Azure, how to migrate virtual and physical server workloads to Azure IaaS, and how to manage and secure Azure VMs running Windows Server 2019.

Course Objectives:

- Describe the foundational principles of Azure IaaS, including compute, storage, and networking.
- Identify tools used to implement hybrid solutions, including Windows Admin Center and PowerShell.
- Implement identity in Hybrid scenarios, including Azure AD DS on Azure IaaS and managed AD DS.
- Integrate Azure AD DS with Azure AD.
- Manage and monitor hybrid scenarios using WAC, Azure Arc, Azure Automation and Azure Monitor.

Course Content:

Module 1: Introducing Azure Hybrid IaaS with Windows Server 2019

- Overview of Azure IaaS
- Overview of the Azure hybrid model
- Using hybrid admin tools

Module 2: Implementing Identity in Hybrid Scenarios

- Implementing AD DS on Azure IaaS
- Integrating AD DS with Azure AD
- Implementing managed AD DS environments

Module 3: Facilitating Hybrid Management and Operational Monitoring in Hybrid Scenarios

- Windows Admin Center
- Azure Arc
- Azure Monitor
- Azure Automation

Module 4: Implementing Security Solutions in Hybrid Scenarios

- Azure Security Center
- Azure Sentinel
- Managing Windows Updates

Module 5: Implementing File Services in Hybrid Scenarios

- Implementing Azure Files
- Implementing Azure File Sync

Module 6: Deploying and Configuring Azure VMs

- Deploying Azure VMs
- Configuring Azure VM networking
- Configuring Azure VM storage
- Configuring Azure VM security

Module 7: Managing and maintaining Azure VMs

- Managing Azure VMs running Windows Server 2019
- Maintaining Azure VMs running Windows Server 2019

Module 8: Planning and Implementing Migration and Recovery Services in Hybrid Scenarios

- Azure Migrate
- Storage Migration Server
- Azure Site Recovery
- Storage Replica
- Azure Backup

C. [WS-013T00-A: Azure Stack HCI](#)

Course Objectives:

- Describe the Azure Stack portfolio, including Azure Stack HCI, Azure Stack Hub, and Azure Stack Edge
- Describe the Azure Stack HCI core technologies and management tools.
- Describe the process of a typical Azure Stack HCI implementation.
- Identify Azure Stack HCI hybrid capabilities.
- Implement, manage, and maintain workloads on Azure Stack HCI.
- Plan for and implement Azure Stack HCI Storage, including Storage QoS and Storage Replica. Plan for Azure Stack HCI Networking.
- Implement Software Defined Networks in Azure Stack HCI.

Course Description:

This course is intended primarily for IT Professionals who already have significant experience with managing an on-premises Windows Server environment. Its purpose is to cover advanced topics related to Windows Server software-defined data center, Azure Stack HCI, and other Azure Stack products.

The course also describes the use of existing Microsoft System Center products to implement and manage software-defined data centers with Windows Server 2019. This course is advanced and is designed for people that want to run their virtual workloads on Windows Server 2019 at medium-to-large scale using software-defined data center and hyper-converged principles.

Course Content:

Module 1: Introducing Azure Stack HCI

- Overview of Azure Stack HCI
- Overview of Azure Stack HCI technologies
- Overview of Azure Stack HCI management tools
- Overview of the Azure Stack HCI hybrid capabilities

Module 2: Operating and Maintaining Azure Stack HCI

- Implementing and managing workloads on Azure Stack HCI
- Maintaining Azure Stack HCI

Module 3: Planning for and Implementing Azure Stack HCI storage

- Overview of Azure Stack HCI Storage core technologies
- Planning for Storage Spaces Direct in Azure Stack HCI
- Implementing a Storage Spaces Direct-based hyper-converged infrastructure
- Managing Storage Spaces Direct in Azure Stack HCI
- Planning for and implementing Storage QoS
- Planning for and implementing Storage Replica

Module 4: Planning for and Implementing Azure Stack HCI networking

- Overview of Azure Stack HCI core networking technologies
- Overview of network virtualization and Software-Defined Networking
- Planning for and implementing Switch Embedded Teaming
- Planning for and implementing Data Center Firewall
- Planning for and implementing Software Load Balancing
- Planning for and implementing RAS Gateways