

**COURSE GENERAL TIMING**

<b>Session</b>	<b>Duration</b>	<b>Time Duration in minutes</b>
Session 1	9:00 AM to 10:45 AM	105
Break	10:45 AM to 11:00 AM	15
Session 2	11:00 AM to 12:30 PM	90
Break	12:30 PM to 1:30 PM	60
Session 3	1:30 PM to 2:45 PM	75
Break	2:45 PM to 3:00 PM	15
Session 4	3:00 PM to 5:00 PM	120

### COURSE CONTENT

Main Topics	Sub-topics	Duration (hours)
<b>DAY 1</b>		
Module 1: Windows Server Administration Overview	<ul style="list-style-type: none"> <li>• Introducing Windows Server 2019</li> <li>• Windows Server Core Overview</li> <li>• Windows Server administration principles and tools overview</li> <li>• Lab : Deploying and configuring Windows Server               <ul style="list-style-type: none"> <li>- Deploying and configuring Server Core</li> <li>- Implementing and using remote server administration</li> </ul> </li> </ul>	3
Module 2: Identity Services in Windows Server	<ul style="list-style-type: none"> <li>• AD DS Overview</li> <li>• Deploying Windows Server domain controllers</li> <li>• Azure AD overview</li> <li>• Implementing Group Policy</li> <li>• Active Directory Certificate Services overview</li> <li>• Lab: Implementing Identity Services and Group Policy               <ul style="list-style-type: none"> <li>- Deploying new domain controller on Server Core</li> <li>- Configuring Group Policy</li> <li>- Deploying and using certificate services</li> <li>- Explain Group Policy basics and configure GPOs in a domain environment</li> <li>- Describe the role of Active Directory certificate services and certificate usage</li> </ul> </li> </ul>	3.5
<b>Total Break Duration</b>		1.5
<b>DAY 2</b>		
Module 3: Network Infrastructure services in Windows Server	<ul style="list-style-type: none"> <li>• Deploying and managing DHCP</li> <li>• Deploying and managing DNS service</li> <li>• Deploying and managing IPAM</li> <li>• Remote Access Services in Windows Server</li> <li>• Lab : Implementing and configuring network infrastructure services in Windows Server               <ul style="list-style-type: none"> <li>- Deploying and configuring DHCP</li> <li>- Deploying and configuring DNS</li> <li>- Implementing Web Application Proxy</li> </ul> </li> </ul>	2.5
Module 4: File Servers and Storage management in Windows Server	<ul style="list-style-type: none"> <li>• Volumes and File Systems in Windows Server</li> <li>• Implementing sharing in Windows Server</li> <li>• Implementing Storage Spaces in Windows Server</li> <li>• Implementing Data Deduplication</li> <li>• Implementing iSCSI</li> <li>• Deploying Distributed File System</li> </ul>	2

	<ul style="list-style-type: none"> <li>• Lab : Implementing storage solutions in Windows Server               <ul style="list-style-type: none"> <li>- Implementing Data Deduplication</li> <li>- Configuring iSCSI storage</li> <li>- Configuring redundant storage spaces</li> <li>- Implementing Storage Spaces Direct</li> </ul> </li> </ul>	
Module 5: Hyper-V virtualization and containers in Windows Server	<ul style="list-style-type: none"> <li>• Hyper-V in Windows Server</li> <li>• Configuring VMs</li> <li>• Securing virtualization in Windows Server</li> <li>• Containers in Windows Server</li> <li>• Overview of Kubernetes</li> <li>• Lab : Implementing and configuring virtualization in Windows Server               <ul style="list-style-type: none"> <li>- Creating and configuring VMs</li> <li>- Installing and configuring containers</li> </ul> </li> </ul>	2
<b>Total Break Duration</b>		1.5
<b>DAY 3</b>		
Module 6: High Availability in Windows Server	<ul style="list-style-type: none"> <li>• Planning for failover clustering implementation</li> <li>• Creating and configuring failover cluster</li> <li>• Overview of stretch clusters</li> <li>• High availability and disaster recovery solutions with Hyper-V VMs</li> <li>• Lab : Implementing failover clustering               <ul style="list-style-type: none"> <li>- Configuring storage and creating a cluster</li> <li>- Deploying and configuring a highly available file server</li> <li>- Validating the deployment of the highly available file server</li> </ul> </li> </ul>	2.5
Module 7: Disaster recovery in Windows Server	<ul style="list-style-type: none"> <li>• Hyper-V Replica</li> <li>• Backup and restore infrastructure in Windows Server</li> <li>• Lab : Implementing Hyper-V Replica and Windows Server Backup               <ul style="list-style-type: none"> <li>- Implementing Hyper-V Replica</li> <li>- Implementing backup and restore with Windows Server Backup</li> </ul> </li> </ul>	1.5
Module 8: Windows Server security	<ul style="list-style-type: none"> <li>• Credentials and privileged access protection</li> <li>• Hardening Windows Server</li> <li>• JEA in Windows Server</li> <li>• Securing and analyzing SMB traffic</li> <li>• Windows Server update management</li> <li>• Lab : Configuring security in Windows Server               <ul style="list-style-type: none"> <li>- Configuring Windows Defender Credential Guard</li> <li>- Locating problematic accounts</li> <li>- Implementing LAPS</li> </ul> </li> </ul>	2.5

<b>Total Break Duration</b>		1.5
<b>DAY 4</b>		
Module 9: RDS in Windows Server	<ul style="list-style-type: none"> <li>• Overview of RDS</li> <li>• Configuring a session-based desktop deployment</li> <li>• Overview of personal and pooled virtual desktops</li> <li>• Lab : Implementing RDS in Windows Server               <ul style="list-style-type: none"> <li>- Implementing RDS</li> <li>- Configuring Session Collection Settings and using RDC</li> <li>- Configuring a virtual desktop template</li> </ul> </li> </ul>	3
Module 10: Remote access and web services in Windows Server	<ul style="list-style-type: none"> <li>• Implementing VPNs</li> <li>• Implementing Always On VPN</li> <li>• Implementing NPS</li> <li>• Implementing Web Server in Windows Server</li> <li>• Lab : Deploying network workloads               <ul style="list-style-type: none"> <li>- Implementing VPN in Windows Server</li> <li>- Deploying and Configuring Web Server</li> </ul> </li> </ul>	3.5
<b>Total Break Duration</b>		1.5
<b>DAY 5</b>		
Module 11: Server and performance monitoring in Windows Server	<ul style="list-style-type: none"> <li>• Overview of Windows Server monitoring tools</li> <li>• Using Performance Monitor</li> <li>• Monitoring event logs for troubleshooting</li> <li>• Lab : Monitoring and troubleshooting Windows Server               <ul style="list-style-type: none"> <li>- Establishing a performance baseline</li> <li>- Identifying the source of a performance problem</li> <li>- Identifying the source of a performance problem</li> </ul> </li> </ul>	4
Module 12: Upgrade and migration in Windows Server	<ul style="list-style-type: none"> <li>• AD DS migration</li> <li>• Storage Migration Service</li> <li>• Windows Server migration tools</li> <li>• Lab : Migrating Server workloads               <ul style="list-style-type: none"> <li>- Implementing Storage Migration Service</li> </ul> </li> </ul>	2.5
<b>Total Break Duration</b>		1.5