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## Installing and Configuring Windows 10

**Duration: 5 Days**    **Course Code: M-MD100**    **Version: A**

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### Overview:

In this course, students will learn how to support and configure Windows 10 desktops in an organizational environment. Students will develop skills that include learning how to install, customize, and update Windows 10 operating systems. Students will learn how to managing storage, files, and devices as well as how to configure network connectivity for Windows 10. Students will also learn how to secure the Windows 10 OS and protect the data on the device. Finally, students will learn how to manage and troubleshoot Windows 10.

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### Target Audience:

Candidates for this exam are IT professionals who perform installation, configuration, general local management and maintenance of Windows 10 core services. Candidates may also be familiar with enterprise scenarios and cloud-integrated services.

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### Objectives:

- **After you complete this course you will be able to:**
  - Install and customize Windows 10
  - Configure Updates for Windows.
  - Configure devices and drivers for Windows.
  - Configure storage for Windows.
  - Configure network and remote management settings in Windows.
  - Configure and manage browsers and applications in Windows.
  - Configure account access and authentication.
  - Configure file and folder permissions.
  - Describe methods for securing Windows 10, common threats and methods for mitigating against them.
  - Troubleshoot Windows and application installations.
  - Troubleshoot hardware and driver issues.
  - Troubleshoot file issues and perform recoveries.
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### Prerequisites:

**Attendees should meet the following prerequisites:**

- Basic understanding of computer networks and hardware concepts.
- Basic understanding of OS and Application concepts.
- Experience with using the Windows OS.

### Testing and Certification

This course helps to prepare for exam MD-100.

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### Follow-on-Courses:

M-MD101, Managing Modern Desktops would be very helpful in order to achieve your certification for Microsoft 365 Certified Modern Desktop Administrator Associate.

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## Content:

Module 1: Installing Windows	Overview of storage options	Lab : Creating Connection Security Rules
This module covers installing the Windows 10 OS. Students will learn the different editions of Windows 10, requirements, and new features introduced. This module covers how to install the OS, as well as methods for migrations and upgrading. Students will also learn about common tools used in the deployment process.	Managing Local Storage	Lab : Using EFS
	Maintaining Disks and Volumes	Lab : Using Bitlocker
	Managing Storage Spaces	Lab : Configuring AppLocker
Introducing Windows 10	Lab : Managing Storage	After completing this module, students will be able to:
Windows 10 Editions and Requirements	Lab : Compressing Folders	Identify common security threats.
Deployment Options	Lab : Enabling Disk Quotas	Describe the methods by which you can mitigate these common security threats.
Upgrading to Windows 10	Lab : Creating a Storage Space	Describe the different methods of encryption.
Deployment Tools	Lab : Synchronizing files with OneDrive	Describe how Windows firewall can secure the device.
Lab : In-place upgrade of Win7 to Win 10	After completing this module, students will be able to:	Describe the benefits of using IPsec.
Lab : Migrating User Settings using USMT	Describe the options and benefits of local, cloud, and virtual storage.	Describe the different features of Windows Defender.
After completing this module, students will be able to:	Configure OneDrive.	Describe the benefits of using AppLocker.
Understanding the different editions and features of Windows 10.	Configure local disk partitions and volumes.	Module 10: Supporting the Windows 10 Environment
Understand the Windows 10 client installation options.	Describe the capabilities and benefits of Storage spaces.	This module will cover the Windows 10 architecture and common environments. Students will be introduced to the various tools used in maintaining Windows. This module will also discuss methodologies for effectively troubleshooting issues and how to proactively manage and optimize Windows 10.
Practice installing Windows 10.	Module 6: Managing Apps in Windows 10	Windows Architecture
Migrate content using the User State Migration Tool.	In this module, Students will be introduced to App management in Windows 10. This module will cover the different types of apps and supported installation methods. Students will learn how to install apps using manual and automated methods, as well as manage app delivery using the Windows Store. Finally, this module will cover the differences between Internet Explorer and Microsoft Edge.	Support and Diagnostic Tools
Module 2: Post-installation Configuration and Personalization	Providing Apps to Users	Monitoring and Troubleshooting Computer Performance
This module covers common post-installation tasks in Windows 10. Students will learn how to customize the user interface, as well as using the control panel and settings app to configure common OS settings. This course will also introduce students to Windows PowerShell. This module will cover how device drivers work		

and how they work. Students will also be introduced to managing and configuring hardware peripherals such as printers.	Managing Universal Windows Apps	Lab : Monitoring Events
	Web Browsers in Windows 10	Lab : Monitoring Reliability and Performance
Configure and Customize the Windows Start Menu	Lab : Sideloaded an App	After completing this module, students will be able to:
Common Configuration Options	Lab : Installing and Updating Microsoft Store Apps	Describe the Windows architecture.
Advanced Configuration Methods	Lab : Configuring Internet Explorer Enterprise Mode	Describe key stages in troubleshooting.
Managing Drivers and Devices		
Lab : Using Settings App ; Control Panel	After completing this module, students will be able to:	Describe the purpose and benefits of the various tools in Windows.
Lab : Using Group Policy Objects	Describe the different types of applications.	Use monitoring tools to establish a performance baseline
Lab : Using PowerShell to Configure Windows	Install applications manually and using automated methods.	Optimize performance on Windows 10 clients.
Lab : Managing local and network printers	Manage application deployment using the Windows Store.	Module 11: Troubleshooting Files ; Applications
After completing this module, students will be able to:	Learn about web browser features in Windows 10.	This module helps students plan for file backup and recovery. Students will learn how to plan and configure data protection strategies and how to perform various file and system recovery methods. This module also includes common methods for troubleshooting application installation issues, compatibility issues, and resolving browser issues.
Customize the Windows 10 UI	Module 7: Configuring Authorization ; Authentication	File Recovery in Windows 10
Configure device specific settings such as power plans and mobile device options.	This module introduces the tools and features of Windows 10 for authorizing access to Windows 10 clients. Students will learn about methods for how users sign-in to Windows 10. This module also covers restricting what users can or cannot do on a device through methods like UAC and account types.	Application Troubleshooting
Use the Windows control panel and setting app to configure settings.	Authentication	Lab : Using File History to Recover Files
Perform tasks using Windows PowerShell.	Configuring User Account Control	Lab : Troubleshooting Desktop Apps
Describe concepts related to drivers.	Implementing Device Registration	Lab : Troubleshooting Application Compatibility Issues
Describe printer management concepts.	Lab : Joining a Domain	Lab : Troubleshooting Microsoft Edge Issues
Configure client-side printing and managing print server properties.	Lab : Creating Security Policies	After completing this module, students will be able to:
Module 3: Updating Windows in Windows	Lab : Configuring UAC	

Students will learn the various different methods for updating Windows and applications, as well as managing updates using tools like group policy and Windows Update for Business.	After completing this module, students will be able to:	Describe the different methods of file recovery.
Windows Servicing Model	Describe the different methods for securing data and the Windows 10 OS.	Configure Windows 10 to support individual file and system recovery.
Updating Windows	Describe the different types of user and service accounts.	Recover a device using the Reset This PC function.
Lab : Updating Windows 10	Configure Windows Hello.	Solve application compatibility issues with the Application Compatibility Toolkit.
After completing this module, students will be able to:	Configure user account control.	Troubleshoot common browser issues.
Describe the Windows servicing model.	Module 8: Configuring Data Access and Usage	Module 12: Troubleshooting the OS
Configure Windows update settings.	In this module, Students will learn about permissions. This module will cover considerations for different files systems. Students will learn how to configure file and folder permissions as well as shared folders. The module will conclude with configuring settings through methods such as local and group policy.	In this module, Students will learn how to troubleshoot startup and service issues related to the operating system. This module will teach the different startup and recovery options, and how to troubleshoot different Windows services.
Describe updating Windows using WSUS.		
Describe updating Windows using Windows Update for Business.		Troubleshooting Windows Startup
Configure Windows update using group policy.	Overview of File Systems	Troubleshooting Operating System Service Issues
Module 4: Configuring Networking	Configuring and Managing File Access	Lab : Recovering using Reset This PC
In this module, Students will learn about networking concepts. This module will introduce to IPv4 and IPv6, and concepts like DNS. Students will learn how to configure network settings in Windows, as well as learn about wireless network technologies. The module will conclude with methods of managing Windows remotely.	Configuring and Managing Shared Folders	Lab : Recovering using a Restore Point
Configure IP Network Connectivity	Lab : Creating, Managing, and Sharing a Folder	After completing this module, students will be able to:
Implement Name Resolution	Lab : Using Conditions to Control Access and Effective Permissions	Describe the various methods identifying and recovering from startup issues.
Implement Wireless Network Connectivity	After completing this module, students will be able to:	Describe when to use the various advanced startup options.
Remote Access Overview	Describe the differences and benefits of supported file systems.	Identify and disable a failed service.
Remote Management	Configure file and folder permissions.	Identify and mitigate common locked account scenarios.
Lab : Configuring Network Connectivity	Configure shared folders.	Module 13: Troubleshooting Hardware and Drivers

Lab : Configuring and Testing Name Resolution	Secure Windows through local policy settings.	
Lab : Remote Management	Module 9: Configuring Threat Protection and Advanced Security	This module introduces hardware troubleshooting. Students will learn about driver management and how to troubleshoot devices. Students will also learn steps for troubleshooting system hardware and external peripherals such as USB drives and printers, including diagnostic methods and remediation.
After completing this module, students will be able to:	This module introduces students to protecting devices from external threats. Students will learn about the different types of common threats. This module will teach students about using encryption, firewalls, and IPSec to help protect against threats. The module will conclude with how to configure and use Windows Defender and AppLocker.	Troubleshooting Device Driver Failures
Configure IP network connectivity.		Overview of Hardware Troubleshooting
Describe how name resolution works.	Malware and Threat Protection	Troubleshooting Physical Failures
Describe remote access technologies like VPNs.	Windows Defender	Lab : Recovering using Driver Rollback
Configure Windows for remote management and access.	Connection Security Rules	After completing this module, students will be able to:
Module 5: Configuring Storage	Advanced Protection Methods	Troubleshoot and remediate driver issues.
This module covers storage configuration and management in Windows 10. Students will be introduced to local, cloud and virtual storage options. This course will also cover configuring storage on client devices and introduce storage spaces.	Lab : Configuring Windows Defender	Troubleshoot Peripherals
	Lab : Creating Firewall Rules	Diagnose and replace hardware.

### Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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