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## Microsoft Windows 10 MD100

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**Duration** : 5 Days

### Overview

In this course, students will learn how to support the installation tasks associated with Windows 10. Students will develop skills that include learning how to install and customize Windows 10 operating systems. Students will also learn about the new Windows servicing model and methods for keeping Windows up to date. The course will conclude with common post-installation tasks.

Students will learn how to support the configuration tasks associated with Windows 10. Students will develop skills that include managing storage, files, drivers, and printers as well as how to configure network connectivity for Windows 10. This course will also cover managing and deploying applications.

Students will learn how to secure the Windows 10 OS and protect the data on the device. Students will be introduced to common methods used for authentication and access control. This course will teach how to configure file and folder permissions and creating security policies. Students will also be introduced to the different types of external threats and how to leverage features like encryption and firewalls, as well as tools like Windows Defender.

Students will learn how to manage and troubleshoot Windows 10. This course will deep-dive into the architecture and tools used for managing, monitoring, and troubleshooting the OS, Apps, and hardware. Students will learn about proactive and troubleshooting methodology, and how to identify and mitigate common issues.

### 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.

### Special Notices

This course is comprised of the following Microsoft Official Curriculum modules:

- MD-100T01 Installing Windows 10
- MD-100T02 Configuring Windows 10
- MD-100T03 Protecting Windows 10
- MD-100T04 Maintaining Windows 10

### Prerequisites

Learners should start this course already having the following skills:

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

### Objectives

After completing this course, learners should be able to:

- Prepare to install Windows 10.
- Install Windows 10.
- Configure Updates for Windows.
- Perform post-installation configuration tasks.
- Configure devices and drivers for Windows.
- Configure storage for Windows.
- Configure network settings in Windows.
- Configure remote management of Windows.
- Configure and manage applications in Windows.
- Configure Internet Explorer.



- Describe the methods for securing Windows 10.
- Configure account access and authentication.
- Configure file and folder permissions.
- Create security policies.
- Describe common threats and methods for mitigating against them.
- Use Windows troubleshooting and monitoring tools.
- Troubleshoot Windows installations.
- Troubleshoot application installation issues.
- Troubleshoot web browser settings.
- Troubleshoot Windows authentication.
- Troubleshoot hardware issues related to Windows machines.

## Course Content

### Installing Windows

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.

#### Lessons

Introducing Windows 10  
Installation Options  
Requirements for Windows Features  
Installation Process and Media  
Upgrading to Windows 10

Lab : Installing Windows 10  
Upgrading Windows 7 to Windows 10  
Migrating User Settings

### Updating Windows

In this module, Students will learn about keeping Windows 10 up-to-date. Students will be introduced to the new Windows servicing model and how it applies to various scenarios. 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.

#### Lessons

Windows Servicing Model  
Updating Windows  
Applying Applications and Windows Updates

Lab : Updating Windows 10  
Configuring Updates for a Single Device  
Configuring Updates with GPOs

### Post-installation Configuration and Personalization

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.

#### Lessons

Customize the Windows 10 UI.  
Configure device specific settings such as power plans and mobile device options.  
Use the Windows control panel and setting app to configure settings.  
Describe using Windows PowerShell.

Lab : Configuring Windows 10  
Using the Settings App  
Using Control Panel Using Control Panel  
Using Windows PowerShell

### Configuring Peripherals and Drivers

This module will cover device configuration. Students will learn how device drivers work and how to install them. Students will also be introduced to managing and configuring hardware peripherals such as printers.

Lessons

Managing Devices and Drivers  
Managing Printers

### Configuring Networking

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.

Lessons

Configure IP Network Connectivity  
Implement Name Resolution  
Implement Wireless Network Connectivity  
Remote Access Overview  
Remote Management

### Configuring Storage

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.

Lessons

Overview of storage options  
Using OneDrive  
Managing Disks, Partitions, and Volumes  
Maintaining Disks and Volumes  
Managing Storage Spaces

Lab : Practice Lab: Managing Storage

Adding a Disk  
Creating a Simple Volume  
Compressing a Folder  
Enabling Disk Quotas  
Creating a Storage Space

### Managing Apps in Windows 10

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.

Lessons

Providing Apps to Users  
Managing Universal Windows Apps  
The Windows Store  
Web browsers in Windows 10

### Configuring Authorisation & Authentication

This module introduces the tools and features of Windows 10 for authorising 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.

Lessons

Using Security Settings to Mitigate Threats  
Configuring User Account Control  
Implementing Device Registration  
Authentication

### Configuring Data Access and Usage

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.

#### Lessons

- Overview of File Systems
- Configuring and Managing File Access
- Configuring and Managing Shared Folders
- Managing Security with Policies

Lab : Configuring and Managing Permissions and Shares  
Creating, Managing, and Sharing a Folder  
Using Conditions to Control Access and Effective Permissions

### Configuring Advanced Management Tools

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.

#### Lessons

- Configuring Tenant Roles
- Managing Tenant Health and Services

Lab : Practice Lab: Managing Network Security  
Creating and Testing Inbound Rules  
Creating and Testing Outbound Rules  
Creating and Testing Connection Security Rules  
Configuring Windows Defender

### Supporting the Windows 10 Environment

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.

#### Lessons

- Troubleshooting Windows
- Troubleshooting Tools

Lab : Practice Lab: Monitoring Windows 10  
Monitoring Events  
Monitoring Reliability and Performance

### Troubleshooting the Windows OS

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.

#### Lessons

- Troubleshooting Windows Startup
- Troubleshooting Operating System Service Issues
- Troubleshooting Sign-In Issues

### **Troubleshooting Files & Applications**

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.

#### Lessons

- File Recovery in Windows 10
- Application Troubleshooting

#### Lab : Troubleshooting Desktop Apps

- Troubleshooting AppLocker Policy Applications
- Troubleshooting Application Compatibility Issues
- Troubleshooting Microsoft Internet Explorer Issues
- Troubleshooting Microsoft Edge Issues

### **Troubleshooting Hardware and Drivers**

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.

#### Lessons

- Troubleshooting Device Driver Failures
- Overview of Hardware Troubleshooting
- Troubleshooting Physical Failures

#### Lab : Troubleshooting Device Driver Issues

- Troubleshooting a Missing Device Driver
- Resolving Hardware Problems
- Resolving device driver problem
- Configuring Group Policy Settings to Control Device Installation