



Microsoft 365

MD-100: Windows 10

\$2,995.00

- 5 Days

Upcoming Dates

Feb 10 - Feb 14

May 04 - May 08

Course Description

Day 1: Installing Windows 10 (MD-100T01-A)

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.

Day 2 and 3: Configuring Windows 10 (MD100T02-A)

In this course, 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.

Day 4: Protecting Windows 10 (MD-100T03-A)

In this course, 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.

Day 5: Maintaining Windows 10 (MD-100T04-A)

In this course, 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.

Course Outline

Day 1 (MD-100T01-A)

Course Outline

Module 1: 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

After completing this module, students will be able to:

- Understanding the different editions and features of Windows 10.
- Understand the Windows 10 client installation options.
- Practice installing Windows 10 using an online virtual machine.

Module 2: 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

After completing this module, students will be able to:

- Describe the Windows servicing model.
- Configure Windows update settings.
- Describe updating Windows using WSUS.
- Describe updating Windows using Windows Update for Business.
- Configure Windows update using group policy.

Module 3: 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

After completing this module, students will be able to:

- 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.

Day 2 and 3 Configuring Windows 10 (MD-100T02-A)

Course Outline

Module 1: 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

After completing this module, students will be able to:

- Describe concepts related to drivers.
- Install a device driver.
- Describe printer management concepts.
- Configure client-side printing and managing print server properties.

Module 2: 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

After completing this module, students will be able to:

- Describe the different types of applications.
- Install applications manually and using automated methods.
- Manage application deployment using the Windows Store.
- Learn about web browser features in Windows 10.

Module 3: 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

After completing this module, students will be able to:

- Describe the options and benefits of local, cloud, and virtual storage.
- Configure OneDrive.
- Configure local disk partitions and volumes.
- Describe the capabilities and benefits of Storage spaces.

Module 4: 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

After completing this module, students will be able to:

- Describe the different types of applications.
- Install applications manually and using automated methods.
- Manage application deployment using the Windows Store.
- Learn about web browser features in Windows 10.

Day 4 Protecting Windows 10 (MD-100T03-A)

Course Outline

Module 1: Managing Authentication in Azure AD

In this module, students will be introduced to the concept of directory in the cloud with Azure AD. Students will learn the similarities and differences between Azure AD and Active Directory DS and how to synchronize between the two. Students will explore identity management in Azure AD and learn about identity protection using Windows Hello for Business, as well as Azure AD Identity Protection and multi-factor authentication. The module will conclude with securely accessing corporate resources and introduce concepts such as Always On VPN and remote connectivity in Windows 10.

Lessons

- Azure AD Overview
- Managing identities in Azure AD
- Protecting identities in Azure AD
- Managing device authentication
- Enabling corporate access

Lab : Practice Lab - Managing objects and authentication in Azure AD

- Enabling and configuring Azure AD Premium with Enterprise Mobility + Security (EMS) tenant

- Creating user and group objects with UI and Windows PowerShell
- Configuring Self-service password reset (SSPR) for user accounts in Azure AD
- Joining a device to Azure AD

After completing this module, students will be able to:

- Describe the capabilities of Azure AD.
- Manage users using Azure AD with Active Directory DS.
- Implement Windows Hello for Business.
- Join devices to Azure AD.
- Describe methods of enabling access from external networks.

Module 2: Managing Devices and Device Policies

In this module, students will be introduced to managing device security with Intune. Students will discover how Intune can use device profiles to manage configuration of devices to protect data on a device. Students will learn how to create and deploy compliance policies and use compliance policies for conditional access. The module concludes with monitoring devices enrolled in Intune.

Lessons

- Microsoft Intune Overview
- Managing devices with Intune
- Implement device compliance policies

Lab : Practice Lab - Managing devices

- Configuring Microsoft Intune for device management
- Configuring compliance policies and device profiles
- Enrolling Windows 10 devices and managing compliance

After completing this module, students will be able to:

- Describe mobile device management with Intune.
- Create and assign device profiles to protect data on devices.
- Deploy compliance and conditional access policies.
- Use Intune to monitor device compliance.

Module 3: Managing Security

In this module, students will learn about data protection. Topics will include Windows & Azure Information Protection, and various encryption technologies supported in Windows 10. This module also covers key capabilities of Windows Defender Advanced Threat Protection and how to implement these capabilities on devices in your organization. The module concludes using Windows Defender and using functionalities such as antivirus, firewall and Credential Guard.

Lessons

- Implement device data protection
- Managing Windows Defender ATP
- Managing Windows Defender in Windows 10

Lab : Practice Lab - Managing Security in Windows 10

- Configuring Encrypting File System (EFS)
- Configuring BitLocker
- Configuring a WIP policy in Intune
- Configuring Windows Defender

After completing this module, students will be able to:

- Describe the methods protecting device data.
- Describe the capabilities and benefits of Windows ATP
- Deploy and manage settings for Windows Defender clients.

Day 5 Managing Windows 10 (MD-100T04A)

Course Outline

Module 1: 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

After completing this module, students will be able to:

- Describe the Windows architecture.
- Describe key stages in troubleshooting.
- Describe the purpose and benefits of the various tools in Windows.
- Use monitoring tools to establish a performance baseline.
- Optimize performance on Windows 10 clients.

Module 2: 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

After completing this module, students will be able to:

- Describe the various methods identifying and recovering from startup issues.
- Describe when to use the various advanced startup options.
- Identify and disable a failed service
- Identify and mitigate common locked account scenarios.

Module 3: 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

After completing this module, students will be able to:

- Describe the different methods of file recovery.
- Configure Windows 10 to support individual file and system recovery.
- Recover a device using the Reset This PC function.
- Solve application compatibility issues with the Application Compatibility Toolkit.
- Troubleshoot common browser issues.

Module 4: 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

After completing this module, students will be able to:

- Troubleshoot and remediate driver issues.
- Troubleshoot Peripherals
- Diagnose and replace hardware.

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.

The Modern Desktop Administrator deploys, configures, secures, manages, and monitors devices and client applications in an enterprise environment. Responsibilities include managing identity, access, policies, updates, and apps. The MDA collaborates with the M365 Enterprise Administrator to design and implement a device strategy that meets the business needs of a modern organization.

The Modern Desktop Administrator must be familiar with M365 workloads and must have strong skills and experience of deploying, configuring, and maintaining Windows 10 and non-Windows devices. The MDA role focuses on cloud services rather than on-premises management technologies.

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.

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. The Modern Desktop Administrator must be familiar with M365 workloads and must have strong skills and experience of deploying, configuring, and maintaining Windows 10 and non-Windows devices. The MDA role focuses on cloud services rather than on-premises management technologies.

What You Will Learn

Day 1: Installing Windows 10 (MD-100T01-A)

Prepare to install Windows 10.

Install Windows 10.

Configure Updates for Windows.

Perform post-installation configuration tasks.

Day 2 and 3: Configuring Windows 10 (MD100T02-A)

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.

Day 4: Protecting Windows 10 (MD-100T03-A)

Describe the benefits and capabilities of Azure AD.

Manage users using Azure AD with Active Directory DS.

Implement Windows Hello for Business.

Configure conditional access rules based on compliance policies.

Describe the various tools used to secure devices and data.

Implement Windows Defender Advanced Threat Protection.

Day 5: Maintaining Windows 10 (MD-100T04-A)

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.