Enterprise Computing Solutions - Education Services

# TRAINING OFFERING

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# MD-100T00: Windows Client

| CODE: | LENGTH: | PRICE: |
|---|---|---|
| MCS_MD100 | 40 Hours (5 days) | kr24,000.00 |

## Description

**Course MD-100T01-A: Installing Windows 10**
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.

**Course MD-100T02-A: Configuring Windows 10**
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.

**Course MD-100T03-A: Protecting Windows 10**
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.

**Course MD-100T04-A: Maintaining Windows 10**
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.

## Objectives

**Course MD-100T01-A: Installing Windows 10** 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. **Course MD-100T02-A: Configuring Windows 10**
•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.
After completing this course, learners should be able to: •Configure Internet Explorer.

**Course MD-100T03-A: Protecting Windows 10** After completing this course, learners should be able to:
•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. **Course MD-100T04-A: Maintaining Windows 10**
•Use Windows troubleshooting and monitoring tools.
•Troubleshoot Windows installations.
•Troubleshoot application installation issues.
•Troubleshoot web browser settings.
•Troubleshoot Windows authentication.
After completing this course, learners should be able to: •Troubleshoot hardware issues related to Windows machines.

## 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

## 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.

## Programme

**Course MD-100T01-A: Installing Windows 10** 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 proces
Lessons
•Introducing Windows 10
•Installation Options
•Requirements for Windows Features Lab : Installing Windows 10
•Installation Process and Media •Upgrading Windows 7 to Windows 10
•Upgrading 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 Lab : Updating Windows 10
•Updating Windows •Configuring Updates for a Single Device
•Applying Applications and Windows Updates •Configuring Updates with GPOs
•Describe the Windows servicing model.
•Configure Windows update settings.
•Describe updating Windows using WSUS.
•Describe updating Windows using Windows Update for Business.
After completing this module, students will be able to: •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. Lab : Configuring Windows 10
•Configure device specific settings such as power plans and mobile device options. •Using the Settings App
•Use the Windows control panel and setting app to configure settings. •Using Control Panel Using Control Panel
•Describe using Windows PowerShell. •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. Lessons
•Describe using Windows PowerShell. Module 4: Course Conclusion •Final Exam

Lab : Graded Lab **Course MD-100T02-A: Configuring Windows 10** 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.
After completing this module, students will be able to:
•Describe concepts related to drivers.
Lessons •Install a device driver.
•Managing Devices and Drivers •Describe printer management concepts.
•Managing Printers •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.

Module 5: Course Conclusion

Lessons

•Final Exam Lab : Graded Lab

**Course MD-100T03-A: Protecting Windows 10**

Module 1: Configuring Authorization & Authentication

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.

Lessons

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

After completing this module, students will be able to:

•Describe the different methods for securing data and the Windows 10 OS.
•Describe the different types of user and service accounts.
•Configure Windows Hello.
•Configure user account control.

Module 2: 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

After completing this module, students will be able to:

•Describe the differences and benefits of supported file systems.
•Configure file and folder permissions.
•Configure shared folders.
•Secure Windows through local policy settings.

Module 3: Configuring Threat Protection

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

•Malware and Threat Protection
•Windows Defender
•Connection Security Rules
•Advanced Protection Methods

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

After completing this module, students will be able to:
•Identify common security threats
•Describe the methods by which you can mitigate these common security threats.
•Describe the different methods of encryption.
•Describe how Windows firewall can secure the device.
•Describe the benefits of using IPSec.
•Describe the different features of Windows Defender. Lessons
•Describe the benefits of using AppLocker. Module 4: Course Conclusion •Final Exam

Lab : Graded Lab **Course MD-100T04-A: Maintaining Windows 10** 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 Lab : Practice Lab: Monitoring Windows 10
•Troubleshooting Windows •Monitoring Events
•Troubleshooting Tools •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.
After completing this module, students will be able to:
Lessons •Describe the various methods identifying and recovering from startup issues.
•Troubleshooting Windows Startup •Describe when to use the various advanced startup options.
•Troubleshooting Operating System Service Issues •Identify and disable a failed service
•Troubleshooting Sign-In Issues •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.
Lab : Troubleshooting Desktop Apps
•Troubleshooting AppLocker Policy Applications
Lessons •Troubleshooting Application Compatibility Issues
•File Recovery in Windows 10 •Troubleshooting Microsoft Internet Explorer Issues
•Application Troubleshooting •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.
Lab : Troubleshooting Device Driver Issues
Lessons •Troubleshooting a Missing Device Driver
•Troubleshooting Device Driver Failures •Resolving Hardware Problems
•Overview of Hardware Troubleshooting •Resolving device driver problem
•Troubleshooting Physical Failures •Configuring Group Policy Settings to Control Device Installation
After completing this module, students will be able to:
•Troubleshoot and remediate driver issues.
•Troubleshoot Peripherals Lessons
•Diagnose and replace hardware. Module 5: Course Conclusion •Final Exam Lab : Graded Lab

## Test and Certification

Microsoft 365 Modern Desktop Administrator

## Session Dates

Ved forespørsel. Vennligst kontakt oss

## Tilleggsinformasjon

Denne treningen er også tilgjengelig som trening på stedet. Kontakt oss for å finne ut mer.