

# MD-100: Windows 10

## Course Overview

This course will introduce students to Windows 10. Topics covered include installing Windows 10, configuring and personalizing Windows, updating Windows 10, networking in Windows 10, configuring storage, managing apps, configuring authorization and authentication, configuring access to files and folders, configuring security, and supporting and troubleshooting.

<b><u>Course Introduction</u></b>	2m
Course Introduction	
<b><u>Chapter 1 - Windows 10 Overview</u></b>	28m
Overview of the Windows Client	
What's New	
Small and Medium-Sized Businesses	
Managing Desktops in an Enterprise Environment	
Demo - Windows User Interface	
Windows 10 Editions	
Selecting a Windows 10 Edition	
Minimum Hardware	
Feature Specific Requirements	
<b><u>Chapter 2 - Windows 10 Installation and Deployment</u></b>	35m
Installation Methods	
Activating Windows 10	
Considerations for New Deployments	
Demo - Installing Windows 10	
Upgrading to Windows 10	
Upgrade Paths	
Upgrade Pros and Cons	
Upgrade Pros and Cons	
Imaging and Autopilot	
Client Virtualization	
Client Virtualization	
Deployment Strategies	
Deployment Tools	
Deployment Tools	
User State Migration Tool	
<b><u>Chapter 3 - Windows Updates</u></b>	18m
Introducing the Windows Servicing Model	
Servicing Channels	
Windows Update Options	

Windows Update Settings  
Windows Server Update Services (WSUS)  
Windows Update for Business  
Demo - Configuring Windows Updates

#### **Chapter 4 - User Interface and Options**

32m

Customizing the User Interface  
Action Center  
Configure Cortana  
Demo - Customizing the User Interface  
Settings App  
Demo - Using the Settings App  
Control Panel  
Demo - Using Control Panel  
Configuring Power Plans  
Configuring Display Options  
Mobile Device Options  
Privacy in Windows 10  
Demo - Configuring Additional Options

#### **Chapter 5 - Devices**

51m

Active Directory Domain Services  
Group Policy  
Applying Group Policy  
Windows PowerShell  
Using Windows PowerShell  
Demo - Introduction to Windows PowerShell  
Introduction to Device Drivers  
Device Manager  
Demo - Working with Devices  
Printing Terminology  
Type 4 Printer Drivers  
Managing Client-Side Printing  
Managing Print Server Properties  
Demo - Configure and Manage Printers

#### **Chapter 6 - Windows Apps**

29m

Application Types  
Application Types  
Deployment Options  
Manual Installation  
Automated Installations  
Office 365 Applications  
Microsoft Store  
Controlling Access to Microsoft Store  
Assigned Access  
Sideloaded Apps  
Demo - Working with Applications

## **Chapter 7 - Web Browsers and Features**

23m

Web Browsers  
Microsoft Edge Features and Improvements  
Managing Extensions  
Productivity Features  
Internet Explorer 11  
Privacy Features  
Security Features  
IE Add-ons  
Compatibility Settings  
Demo - Configuring Web Browsers

## **Chapter 8 - User Account Management**

57m

BYOD Challenges  
Challenges to Data Access  
Authentication and Authorization  
User Account Types  
Service Account Management  
Working with Credential Manager  
Windows Hello  
Network Types  
Authentication Process  
Authentication Process  
Password Policies  
User Properties  
User Profiles  
Demo - Viewing User Profiles  
User Account Control  
How UAC Works  
Tasks Requiring Elevation  
Demo - Configuring UAC Notification Settings  
Overview of Device Registration  
Device Registration Process  
Infrastructure Requirements  
Registering Devices

## **Chapter 9 - Understanding Network Settings and Tools**

56m

Windows Network Configuration  
IPv4 Overview  
Demo - Examining IP Addresses and Subnet Masks  
Additional Configuration  
Public vs. Private Addresses  
Assigning IPv4 Addresses  
Configuring Network Settings  
Demo - Configuring Network Settings  
Troubleshooting Tools  
Demo - Using Troubleshooting Tools  
IPv6 Overview  
IPv6 Addressing  
DNS Overview

DNS Queries  
Troubleshooting Name Resolution

**Chapter 10 - Remote Network Features**

47m

Wireless Network Technologies  
Configuring Wireless Settings  
Demo - Configuring Wireless Settings and Miracast  
Virtual Private Networks  
Creating a VPN Connection  
Demo - Creating a VPN Connection  
Remote Desktop  
Remote Assistance  
PowerShell Remoting  
Demo - Using Remote Management

**Chapter 11 - Storage Configuration and Management**

1h 1m

Storage Options  
Network Storage Options  
Cloud Storage Options  
Disk Types  
Dynamic Disks  
Disk Management Tools  
Volume Types  
Managing Existing Volumes  
Demo - Working with Disks  
Monitoring Storage Use  
Disk Fragmentation  
Compression  
Disk Quotas  
Demo - Managing Storage  
Introducing Storage Spaces  
Storage Space Features  
Implementation Scenarios  
Demo - Working with Storage Spaces

**Chapter 12 - Windows Tools**

49m

Windows 10 Devices  
Windows Architecture  
Support Environments  
Troubleshooting Methodology  
Tools Overview  
Demo - Using Troubleshooting Tools  
Overview of the Registry  
Editing the Registry  
Additional Tools  
Key Components  
Performance Baselines  
Performance Monitoring Tools  
Configuring Indexes

### **Chapter 13 - File Features**

33m

File Allocation Table (FAT)  
New Technology File System (NTFS)  
Resilient File System (ReFS)  
Tools to Manage Files and Folders  
Permissions  
Inheritance  
Implementing Conditions to Limit File and Folder Access  
Effective Permissions  
Copying and Moving Files  
Demo - Configuring Permissions

### **Chapter 14 - Shared Folders and OneDrive**

36m

Shared Folders  
Shared Folder Properties  
Demo - Configuring Shared Folders  
Windows Libraries  
Cloud Storage  
OneDrive  
Enabling OneDrive  
Demo - Working with OneDrive  
Work Folders

### **Chapter 15 - Malware and Antivirus Protection**

1h 6m

Types of Malware  
Mitigating Threats  
Phishing  
Network Security Threats  
Mitigating Network Security Threats  
Windows Defender Antivirus  
Windows Defender Firewall  
Network Location Profiles  
Demo - Windows Defender Firewall  
IPSec Overview  
Connection Security Rules  
Authentication Options  
Monitoring Connections  
Demo - Configuring IPSec Connection Security Rules  
Security Compliance  
BitLocker  
Trusted Platform Module (TPM)  
Demo - Using BitLocker  
Encrypting File System (EFS)  
Demo - Using EFS  
Using AppLocker  
Demo - Configuring AppLocker  
Securing Data in the Enterprise  
Windows Defender Advanced Threat Protection (ATP)

**Chapter 16 - Understanding Hardware and System Drivers** 16m

Managing Devices  
Driver Rollback Feature  
Driver Signing  
Staging Device Drivers  
Hardware Related Issues  
Controlling USB Devices  
Troubleshooting Wireless Devices  
Obtaining Hardware Information  
Best Practices  
Physical Failures  
Vulnerable Devices  
Guidelines for Replacing Hardware

**Chapter 17 - Backup and Restore** 35m

File Recovery  
File History  
Azure Backup  
Backup and Restore  
Previous Versions  
File Recovery Options  
Demo - File Recovery  
Windows Installer Issues  
Resolving Deployment Problems  
Desktop App Problems  
Resolving Desktop App Problems  
Resolving UWP App Problems  
Resolving O365 Issues  
Troubleshooting Browser Issues

**Chapter 18 - System Recovery and Troubleshooting** 41m

Startup Architecture  
Understanding Device Recovery  
Windows Recovery Environment (RE)  
Advanced Startup Options  
Using Reset this PC Option  
System Restore  
Additional Windows RE Recovery Tools  
Demo - Operating System Recovery and Troubleshooting  
Working with BCD Store  
Troubleshooting Windows Updates  
Services  
Failed Service Identification  
Disabling Services  
Recovering BitLocker Protected Drives  
Troubleshooting Sign In Errors

**Total Duration: 11h 54m**