Course Content

Course Description:

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.

Students will learn how to support the configuration tasks associated with Windows 10 and 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.

This course will teach 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.

At Course Completion:

After competing this course, student will 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.

Target Student:
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:
- 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.

Topics:

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

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

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.

Module 4: Course Conclusion

Lessons
- Final Exam

Module 5: 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

Module 6: 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

Module 7: 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

Module 8: 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

Module 9: Course Conclusion
Lessons
- Final Exam

Module 10: 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

Module 11: 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

Module 12: 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

Module 13: Course Conclusion
Lessons
- Final Exam

Module 14: 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

Module 15: 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

Module 16: 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

Module 17: 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

Module 18: Course Conclusion

Lessons

- Final Exam