

Microsoft Enterprise Devices and Apps Boot Camp Courses

**Bootcamp Title – MCSE: Enterprise Devices and Apps (1 Cert)**
Number of Days – 7
Number of Exams – 2
Number of Certifications – 1
Cost - $5,595

Certifications:

MCSE: Enterprise Devices and Apps

Exams:

**70-695:** Deploying Windows Desktops and Enterprise Applications

**70-696:**Administering System Center Configuration Manager and Intune

Course Description:

The MCSE Enterprise Devices and Apps certification boot camp is a 7 day comprehensive deep dive into Enterprise Devices and Apps covering topics such as deploying, managing and administering core and advanced features of managing devices and apps. This instructor led training program will teach you the skills needed to support managing devices in today's bring-your-own-device (BYOD) enterprise environment.

Class Objectives (*Following information customized from Microsoft Learning Test Objectives)*

**Module 1: Assessing the network environment for supporting operating system and application deployment**

This module examines how you can create a deployment strategy by using life-cycle information, deployment tools and technologies, and licensing and activation information. It also explains how to plan and effectively perform preparation tasks for deploying Windows 10 client operating systems.

**Lessons**

* Overview of the enterprise desktop life cycle
* Assessing readiness for a desktop deployment by using Configuration Manager
* Assessing deployment readiness by using MAP

**Lab : Assessing the network environment for supporting operating system and application deployment**

* Collecting hardware and application inventory by using Configuration Manager
* Using MAP to determine infrastructure readiness

After completing this module, students will be able to:

  Describe the enterprise desktop life cycle.

  Use Configuration Manager to assess an environment’s readiness for a desktop deployment.

  Use the MAP to assess an environment’s deployment readiness.

**Module 2: Determining operating system deployment strategies**

This module describes the tools and strategies that are available to help you perform a successful operating system deployment. It also explains how to identify the most appropriate operating system deployment strategy for your environment, based upon organizational requirements.

**Lessons**

* Understanding the tools and strategies that are available for effective operating system deployment
* Operating system deployment by using high-touch with retail media
* Operating system deployment by using high-touch with a standard image
* Operating system deployment by using lite-touch
* Operating system deployment by using a zero-touch strategy
* Alternative deployment strategies for Windows desktops

**Lab : Determining operating system deployment strategies**

* Identifying operating system deployment strategies for a small network
* Identifying operating system deployment strategies for a medium-sized network
* Identifying operating system deployment strategies for an enterprise network
* Installing the Windows ADK

After completing this module, students will be able to:

  Describe the tools and strategies that are available for an effective operating system deployment

  Deploy operating systems by using the high-touch with retail media strategy.

  Deploy operating systems by using the high-touch with a standard image strategy.

  Deploy operating systems by using the lite-touch strategy.

  Deploy operating systems by using the zero-touch strategy.

  Describe alternative deployment strategies for Windows desktops.

**Module 3: Assessing application compatibility**

This module describes the process for addressing common application compatibility issues during a new operating system deployment. The module also explains how to use the ACT to help inventory, analyze, and mitigate application compatibility issues.

**Lessons**

* Diagnosing application compatibility issues
* Mitigating application compatibility issues
* Using ACT to address application compatibility issues

**Lab : Assessing application compatibility**

* Analyzing applications for potential compatibility issues
* Mitigating application compatibility issues

After completing this module, students will be able to:

  Describe how to diagnose application compatibility issues.

  Explain the solutions available for mitigating application compatibility issues.

  Resolve application compatibility issues with the ACT.

**Module 4: Planning and implementing user state migration**

This module introduces user state migration, and the tools and methods that are useful in the planning and implementation of a user state migration in the Windows software environment.

**Lessons**

* Overview of user state migration
* Overview of USMT 10.0
* Planning user state migration
* Migrating user state by using USMT

**Lab : Planning and implementing user state migration**

* Planning for user state migration
* Creating and customizing USMT XML files
* Capturing and restoring a user state by using the USMT

After completing this module, students will be able to:

  Describe user state migration.

  Identify the features of USMT 5.0.

  Plan user state migration.

  Migrate user state by using the USMT.

**Module 5: Determining an image management strategy**

This module describes the .wim file format, and explains how to determine the most appropriate image management strategy to support operating system and application deployments in your organization.

**Lessons**

* Overview of the Windows image file format
* Overview of image management

**Lab : Determining an image management strategy**

* Assessing business requirements to support an image management strategy

After completing this module, students will be able to:

  Describe the Windows image file format.

  Determine the most appropriate image management strategy to support operating system and application deployments in your organization.

**Module 6: Preparing for deployments by using the Windows ADK**

This module explains how to use the tools in the Windows ADK to prepare for and support automated deployment strategies. It also explains how to use the Windows Preinstallation Environment (Windows PE) to prepare boot images.

**Lessons**

* Overview of the Windows setup and installation process
* Preparing boot images by using Windows PE
* Using Windows SIM and Sysprep to automate and prepare an image installation
* Capturing and servicing a reference image using DISM
* Using the Windows ICD

**Lab : Preparing the imaging and Windows PE environment**

* Configuring a custom Windows PE environment

**Lab : Building a reference image by using Windows SIM and Sysprep**

* Building custom answer files by using Windows SIM
* Installing a reference computer by using a custom answer file
* Customizing your image in audit mode, and preserving the profile changes by using Sysprep

**Lab : Capturing a reference image**

* Capturing a reference system image

**Lab : Using the Windows ICD**

* Creating a provisioning package
* Creating a Windows 10 deployment package

After completing this module, students will be able to:

  Describe the Windows setup and installation process.

  Prepare boot images by using Windows PE.

  Automate installations and prepare images by using Windows SIM and Sysprep.

  Capture, apply, and service images by using the DISM tool.

  Use the Windows ICD to create a custom provisioning package and a custom image for Windows 10 deployments.

**Module 7: Supporting PXE-initiated and multicast operating system deployments**

This module introduces the architecture of network boot, Pre-Boot EXecution Environment (PXE)-initiated operating system deployments, multicasting operating system delivery, and the Windows Deployment Services functionality in Windows Server 2012 R2.**Lessons**

* Overview of PXE-initiated and multicast operating system deployments
* Installing and configuring the Windows Deployment Services environment

**Lab : Configuring Windows Deployment Services to support PXE and multicast operating system deployments**

* Planning the Windows Deployment Services environment
* Installing and configuring the Windows Deployment Services server role

After completing this module, students will be able to:

  Identify solutions to support PXE-initiated and multicast solutions when performing operating system deployment tasks.

  Install and configure the Windows Deployment Services environment.

**Module 8: Implementing operating system deployment by using the MDT**

This module describes the components of the MDT, and how you can configure an operating system deployment strategy by using the MDT.

**Lessons**

* Planning for the MDT environment
* Implementing MDT 2013 Update 2
* Integrating Windows Deployment Services with MDT

**Lab : Operating system deployment using the MDT**

* Planning for the MDT environment
* Installing MDT 2013 Update 2, and addressing MDT prerequisites
* Creating and configuring the deployment share
* Deploying and capturing a reference operating system image

After completing this module, students will be able to:

  Describe the MDT components and process for a lite-touch deployment strategy.

  Install and configure the MDT environment.

  Describe how you configure Windows Deployment Services to integrate with MDT 2013 Update 2.

**Module 9: Implementing operating system deployment by using Configuration Manager**

This module provides an overview of operating system deployments, and explains how to use Configuration Manager to configure an operating system deployment strategy.

**Lessons**

* An overview of operating system deployment
* Preparing a site for operating system deployment
* Deploying an operating system image

**Lab : Preparing the site for operating system deployment**

* ♣ Managing the site system roles that support operating system deployment
* ♣ Managing packages to support operating system deployment

**Lab : Deploying operating system images for bare-metal installations**

* Preparing the operating system image
* Creating a task sequence to deploy an image
* Deploying an image

After completing this module, students will be able to:

  Describe the terminology, components, and scenarios used to deploy operating systems by using Configuration Manager.

  Prepare a site for zero-touch operating system deployment.

  Describe how to deploy an operating system image.

**Module 10: Integrating MDT and Configuration Manager for operating system deployment**This module explains how to integrate the MDT with Configuration Manager to support operating system deployment procedures. It also describes the benefits of integrating the MDT with Configuration Manager.**Lessons**

* Integrating deployment tools with Configuration Manager
* Integrating MDT with Configuration Manager

**Lab : Integrating MDT and Configuration Manager for operating system deployment**

* Integrating MDT and Configuration Manager
* Creating an MDT boot image
* Creating and deploying an MDT task sequence by using Configuration Manager

**Lab : Configuring UDI**

* Creating a UDI task sequence
* Deploying Windows 10 by using a UDI task sequence

After completing this module, students will be able to:

  Integrate MDT 2013 Update 2 and Configuration Manager to ensure an effective operating system deployment.

  Deploy Windows 10 by using an MDT task sequence.

**Module 11: Activating clients and managing additional configuration settings**

This module describes volume license activation solutions. It also explains how to implement volume license activation and configuration settings for client computers.

**Lessons**

* Solutions for volume license activation
* Determining additional configuration client settings

**Lab : Configuring additional settings for computer clients**

* Planning for Windows 10 customization
* Creating a common Windows Start screen and custom power plan
* Creating a client preferences GPO

After completing this module, students will be able to:

  Describe and implement volume license activation solutions.

  Describe common configuration settings.

**Module 12: Deploying Office 2016 and enterprise applications**

This module explains how to customize and deploy Microsoft Office 2016 to an enterprise network environment. It also explains how to use the Windows ICD.

**Lessons**

* Methods for deploying Microsoft Office 2016 editions
* Customizing Office deployments
* Deploying Office 2016 by using Office 365
* Managing Office settings
* Introducing Windows Store for Business
* Distributing apps by using Windows Store for Business

**Lab : Deploying Microsoft Office 2016 by using the OCT**

* Using OCT to customize an Office 2016 deployment
* Deploying a customized version of Office 2016

**Module 1: Managing PCs and mobile devices in an enterprise**

This module describes the features that Configuration Manager and Intune include, and it details how you can use these solutions to manage PCs and mobile devices in an enterprise environment.

**Lessons**

* Overview of systems management by using enterprise-management solutions
* Overview of the Configuration Manager architecture
* Overview of the Configuration Manager administrative tools
* Tools for monitoring and troubleshooting a Configuration Manager site
* Introduction to queries and reports

**Lab : Exploring the Configuration Manager tools**

* Searching in the Configuration Manager console
* Using Windows PowerShell with Configuration Manager
* Managing components by using Configuration Manager Service Manager
* Monitoring site and component status
* Reviewing log files by using Configuration Manager trace

**Lab : Creating queries, and configuring Reporting Services**

* Creating data queries
* Creating subselect queries
* Configuring a Reporting Services point
* Creating a report by using Report Builder

After completing this module, students will be able to:

* Identify the challenges and solutions for managing PCs and mobile devices in today’s enterprise environment.
* Describe the architecture and roles that pertain to Configuration Manager.
* Identify the management tools that you can use to perform administrative functions in Configuration Manager.
* Identify the tools that you can use to monitor and troubleshoot a Configuration Manager site.
* Create and configure queries and reports in Configuration Manager.

**Module 2: Preparing the management infrastructure to support PCs and mobile devices**

This module explains how to prepare the management infrastructure, including configuring boundaries, boundary groups, and resource discovery, and integrating mobile-device management with Exchange Server.

**Lessons**

* Configuring site boundaries and boundary groups
* Configuring resource discovery
* Configuring the Exchange Server Connector for mobile-device management
* Configuring user and device collections

**Lab : Configuring boundaries and resource discovery**

* Configuring boundaries and boundary groups
* Configuring Active Directory discovery methods

**Lab : Configuring user and device collections**

* Creating a device collection
* Creating a user collection
* Configuring a maintenance window

After completing this module, students will be able to:

* Configure site boundaries and boundary groups in Configuration Manager.
* Configure resource discovery.
* Configure the Exchange Server Connector for mobile-device management.
* Organize resources by using device and user collections.

**Module 3: Deploying and managing the Configuration Manager client**

This module explains how to deploy and manage the Configuration Manager client.

**Lessons**

* Overview of the Configuration Manager client
* Deploying the Configuration Manager client
* Configuring and monitoring client status
* Managing client settings in Configuration Manager

**Lab : Deploying the Configuration Manager client**

* Preparing the site for client Installation
* Deploying the Configuration Manager client software by using client push installation

**Lab : Configuring and monitoring client status**

* Configuring client settings

**Lab : Managing Client Settings**

* Configuring client settings

After completing this module, students will be able to:

* Describe the Configuration Manager client requirements, architecture, and functionality.
* Describe the installation process and methods that you use to deploy the Configuration Manager client.
* Configure and monitor client status.
* Manage default and custom Configuration Manager client settings.

**Module 4: Managing inventory for PCs and applications**

This module describes the inventory collection process. Additionally, it details how to configure, manage, and monitor hardware and software inventory, and use the Asset Intelligence and software metering features.

**Lessons**

* Overview of inventory collection
* Configuring hardware and software inventory
* Managing inventory collection
* Configuring software metering
* Configuring and managing the Asset Intelligence feature

**Lab : Configuring and managing inventory collection**

* Configuring and managing hardware inventory

**Lab : Configuring software metering**

* Configuring software metering

**Lab : Configuring and managing the Asset Intelligence feature**

* Preparing the site for Asset Intelligence
* Configuring Asset Intelligence
* Monitoring license agreements by using Asset Intelligence
* Viewing Asset Intelligence reports

After completing this module, students will be able to:

* Describe inventory collection and identify the differences between managing inventory for personal and corporate-owned devices.
* Configure and collect hardware and software inventory.
* Manage inventory collection.
* Configure and manage software metering.
* Configure and manage Asset Intelligence.

**Module 5: Distributing and managing content used for deployments**

This module explains how to identify and configure the most appropriate method to distribute and manage content that is used for deployments.

**Lessons**

* Preparing the infrastructure for content management
* Distributing and managing content on distribution points

**Lab : Distributing and managing content for deployments**

* Installing a new distribution point
* Managing content distribution

After completing this module, students will be able to:

* Identify the types of content that you should manage and configure a Configuration Manager infrastructure that supports content management.
* Distribute and manage content by using Configuration Manager.

**Module 6: Deploying and managing applications**

This module explains how to distribute, deploy, and monitor applications for managed users and systems.

**Lessons**

* Overview of application management
* Creating applications
* Deploying applications
* Managing applications
* Deploying virtual applications by using Configuration Manager (optional)
* Deploying and managing Windows Store apps

**Lab : Creating and deploying applications**

* Installing and configuring the application catalog roles
* Creating applications with requirements
* Deploying applications

**Lab : Managing application supersedence and removal**

* Managing application supersedence
* Uninstalling the Excel Viewer application

**Lab : Deploying virtual applications by using Configuration Manager (Optional)**

* Configuring support for Microsoft Application Virtualization (App-V)
* Deploying virtual applications

**Lab : Deploying Windows Store apps by using Configuration Manager**

* Configuring support for sideloading Windows Store apps
* Configuring a Windows Store app
* Deploying Windows 10 apps to users

After completing this module, students will be able to:

* Describe application management in Configuration Manager.
* Create applications and deployment types in Configuration Manager.
* Deploy applications by using Configuration Manager.
* Manage application retirement, supersedence, and removal.
* Configure and deploy virtual applications by using Configuration Manager.
* Configure and deploy Windows Store apps by using Configuration Manager.

**Module 7: Maintaining software updates for managed PCs**

This module explains how to maintain software updates for PCs that Configuration Manager manages.

**Lessons**

* Overview of software updates
* Preparing a Configuration Manager site for software updates
* Managing software updates
* Configuring automatic deployment rules
* Monitoring and troubleshooting software updates

**Lab : Configuring the site for software updates**

* Configuring and synchronizing a software-update point

**Lab : Deploying and managing software updates**

* Determining software-update compliance
* Deploying software updates to clients
* Configuring automatic deployment rules

After completing this module, students will be able to:

* Describe the software updates process.
* Prepare a Configuration Manager site for software updates.
* Evaluate and deploy software updates.
* Configure automatic deployment rules.
* Monitor and troubleshoot software updates.

**Module 8: Implementing Endpoint Protection for managed PCs**

This module explains how to use Configuration Manager to implement Endpoint Protection.

**Lessons**

* Overview of Endpoint Protection in Configuration Manager
* Configuring, deploying, and monitoring Endpoint Protection policies

**Lab : Implementing Endpoint Protection**

* Configuring the Endpoint Protection point and client settings
* Configuring and deploying Endpoint Protection policies
* Monitoring Endpoint Protection

After completing this module, students will be able to:

* Describe how you can use Endpoint Protection to help detect and remediate malware and security vulnerabilities.
* Configure, deploy, and manage Endpoint Protection policies.

**Module 9: Managing compliance and secure data access**

This module explains how to manage configuration items, baselines, and profiles to assess and configure compliance settings and data access for users and devices.

**Lessons**

* Overview of compliance settings
* Configuring compliance settings
* Viewing compliance results
* Managing resource and data access

**Lab : Managing compliance settings**

* Managing configuration items and baselines
* Viewing compliance settings and reports
* Configuring remediation in compliance settings
* Using compliance information to create collections

After completing this module, students will be able to:

* Describe the compliance settings available in Configuration Manager.
* Create and deploy configuration items and baselines.
* View compliance results by using reports and log files.
* Manage resource and data access by using connection profiles.

**Module 10: Managing operating-system deployments**

This module explains how to use Configuration Manager to create a strategy for operating-system deployments.

**Lessons**

* An overview of operating-system deployment
* Preparing a site for operating-system deployment
* Deploying an operating-system image

**Lab : Preparing a site for operating-system deployment**

* Managing the site system roles that support operating-system deployment
* Managing packages to support operating-system deployment

**Lab : Deploying operating-system images for bare-metal installations**

* Preparing the operating-system image
* Creating a task sequence to deploy an image
* Deploying an image

After completing this module, students will be able to:

* Describe the terminology, components, and scenarios used to deploy operating systems by using Configuration Manager.
* Prepare a site for a zero-touch operating-system deployment.
* Deploy an operating-system image.

**Module 11: Managing mobile devices by using Configuration Manager and Intune**

This module explains how to manage mobile devices by using Configuration Manager and Intune.

**Lessons**

* Overview of mobile-device management
* Managing mobile devices with on-premises infrastructure
* Managing mobile devices by using Configuration Manager and Intune
* Managing settings and protecting data on mobile devices
* Deploying applications to mobile devices

**Lab : Managing mobile devices with on-premises infrastructure**

* Preparing Configuration Manager prerequisites for on-premises mobile-device management
* Enrolling and configuring a Windows Phone 10 mobile device

After completing this module, students will be able to:

* Describe the mobile-device management features in Configuration Manager.
* Describe how to manage mobile devices by using on-premises infrastructure.
* Describe how to manage mobile devices by integrating Configuration Manager and Intune.
* Describe how to manage settings and protect data on mobile devices.
* Describe how to deploy applications to mobile devices.

**Module 12: Managing and maintaining a Configuration Manager site**

This module explains how to use manage and maintain a Configuration Manager site.

**Lessons**

* Configuring role-based administration
* Configuring remote tools
* Overview of Configuration Manager site maintenance
* Performing backup and recovery of a Configuration Manager site

**Lab : Configuring role-based administration**

* Configuring a new scope for Toronto administrators
* Configuring a new administrative user

**Lab : Configuring remote tools**

* Configuring the settings and permissions for the remote tools client
* Managing desktops by using remote control

**Lab : Maintaining a Configuration Manager site**

* Configuring maintenance tasks in Configuration Manager
* Configuring the site backup task
* Recovering the site from a backup