

Microsoft Windows Azure Administration Course Content:

Course Outline Module 1: Getting started with Microsoft Azure This module introduces students to cloud services and the various Azure services. It describes how to use the Azure portal to access and manage Azure services, and to manage Azure subscription and billing.

Lessons

- What is cloud computing?
- What is Azure?
- Managing Azure
- Subscription management, support, and billing

Lab : Using the Azure portals

- Customizing the Azure portal interface
- Viewing billing, usage, and quotas data

After completing this module, students will be able to:

- Describe cloud computing.
- Describe Azure and its various services.
- Manage Azure services from the Azure portal.
- Manage their Azure subscription and billing.

Module 2: Microsoft Azure management tools

This module explains Azure PowerShell and its use in managing Azure subscriptions. It also describes how to use the Azure SDK and the Azure CLI to manage Azure subscriptions.

Lessons

- What is Azure PowerShell?
- Azure SDK and Azure CLI

Lab : Using Microsoft Azure management tools

- Using the Azure PowerShell modules
- Using the Azure CLI

After completing this module, students will be able to:

- Describe and use Azure PowerShell to manage their Azure subscription.
- Describe and use the Azure SDK and the Azure CLI to manage your Azure subscription.

Module 3: Virtual machines in Microsoft Azure This module explain how to create and configure virtual machines in Azure and how to manage disks for virtual machines.

Lessons

- Creating and configuring VMs
- Configuring disks

Lab : Creating a VM in Azure

- Create a VM from the Azure portal by using an Azure Marketplace image
- Verify the functionality of the VM

- Configure storage of a VM

After completing this module, students will be able to:

- Create and configure VMs in Azure.
- Configure disks for VMs.

Module 4: Web Apps and cloud services This module explains how to create, configure, and monitor web apps in Azure. It also describes how to create and deploy Azure PaaS cloud services.

Lessons

- Creating and configuring web apps
- Deploying and monitoring web apps
- Creating and deploying PaaS cloud services

Lab : Web Apps and cloud services

- Creating and configuring a WordPress web app
- Creating a cloud service

After completing this module, students will be able to:

- Create and configure web apps by using the Azure portal.
- Deploy and monitor web apps in Azure.
- Create and deploy Azure PaaS cloud services.

Module 5: Creating and configuring virtual networks This module explains how to create and implement Azure networks and how to use their components to enhance the resiliency and availability of virtual machines

Lessons

- Getting started with virtual networks
- Configuring Azure networking
- Getting started with Azure Load Balancer

Lab : Create and configure virtual networks

- Creating virtual networks
- Verifying virtual network functionality

After completing this module, students will be able to:

- Describe the purpose and functionality of Azure virtual networks.
- Create Azure virtual networks.
- Describe and implement Azure Load Balancer.

Module 6: Cloud storage This module explains the features and benefits of cloud storage. It also explains how to create, manage, and configure cloud storage in Azure.

Lessons

- Understanding cloud storage
- Create and manage storage

Lab : Configure Azure Storage

- Create an Azure Storage account

- Create and manage blobs

After completing this module, students will be able to:

- Describe the features and benefits of cloud storage.
- Create and manage storage in Azure.

Module 7: Microsoft Azure Databases This module explains the options available for storing relational data in Azure. It also explains how to use SQL Database to create, configure, and manage SQL databases in Azure.

Lessons

- Understanding options for relational database deployments
- Creating and connecting to Azure SQL databases

Lab : Creating a SQL Database in Azure

- Create a new Azure SQL database in Azure and configure SQL Server firewall rules
- Manage content of an Azure SQL database by using SQL Server Management Studio

After completing this module, students will be able to:

- Describe options for relational database deployment in Azure.
- Use Azure to create, connect to, and manage content of SQL databases.

Module 8: Creating and managing Azure AD This module explains how to create users, domains, and directories in Azure AD, integrate applications with Azure AD, and use Multi-Factor Authentication.

Lessons

- Overview of Azure AD
- Manage Azure AD authentication

Lab : Create and manage Azure Active Directory tenants

- Create users in Azure AD
- Create a new Azure AD tenant and a custom DNS domain

After completing this module, students will be able to:

- Create and manage Azure AD tenants, domains, and users.
- Manage Azure AD authentication.