

# Course 10979A:

## Microsoft Azure Fundamentals

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### Course Details

### Course Outline

#### Module 1: Getting Started with Microsoft Azure

This module describes the features of Microsoft Azure and the services it provides. The module also explains how to manage Microsoft Azure by using the Azure portal, Visual Studio, and SQL Server Management Studio. In addition, the module describes how to manage subscriptions and billing.

#### Lessons

- What Is Cloud Computing?
- What Is Azure?
- Managing Azure
- Subscription Management and Billing

#### Lab : Using the Microsoft Azure Portal

- Add a Co-Administrator
- View Billing Data

After completing this module, students will be able to:

- Describe cloud computing.
- Describe Microsoft Azure and the various Azure services.
- Manage Azure services from the Azure portal.
- Manage an Azure subscription and billing.

#### Module 2: Websites and Cloud Services

This module explains the procedures for creating and configuring websites and cloud services. The module also describes how to deploy and monitor websites.

#### Lessons

- Create and Configure Websites
- Deploy and Monitor Websites
- Create and Deploy Cloud Services

## **Lab : Websites and Cloud Services**

- Create a WordPress Website
- Create a Cloud Service

After completing this module, students will be able to:

- Create and configure websites using the Azure portal.
- Deploy and monitor websites on Azure.
- Create and deploy cloud services on Azure.

## **Module 3: Virtual Machines**

This module describes how to create and configure virtual machines and disks.

### **Lessons**

- Create and Configure Virtual Machines
- Configure Disks

## **Lab : Create a Virtual Machine in Microsoft Azure**

- Create a Virtual Machine from the Gallery
- Verify the functionality of the Virtual Machine
- Attach a Data Disk

After completing this module, students will be able to:

- Create and configure virtual machines in Microsoft Azure.
- Configure disks.

## **Module 4: Virtual Networks**

This module provides an overview of virtual networks and also describes the procedure to create one. The module then describes a point-to-site VPN and explains how to set up one.

### **Lessons**

- Getting Started with Virtual Networks
- Creating a Virtual Network
- Implementing Point-to-Site Networks

## **Lab : Create a Virtual Network**

- Creating a Virtual Network
- Creating Virtual Machines from the Gallery

- Add Point-to-Site Connectivity

After completing this module, students will be able to:

- Describe the purpose and functionality of Azure virtual networks.
- Create Azure virtual networks.
- Implement point-to-site networks.

## **Module 5: Cloud Storage**

This module describes cloud storage features such as azure storage accounts, BLOBs, tables, and queues. The module also describes how to create and manage storage.

### **Lessons**

- Understand Cloud Storage
- Create and Manage Storage

### **Lab : Configure Azure Storage**

- Create an Azure Storage Account
- Create and Manage Blobs
- Upload Files

After completing this module, students will be able to:

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

## **Module 6: Microsoft Azure Databases**

This module provides an overview of the relational database deployment options. The module also describes how to create and connect SQL databases.

### **Lessons**

- Understand Relational Database Deployment Options
- Create and Connect to SQL Databases

### **Lab : Create an SQL Database**

- Create a New SQL Database in Azure and Configure SQL Server Firewall Rules
- Add Data to an SQL Database in Azure by Using SQL Server Management Studio

After completing this module, students will be able to:

- Describe options for relational database deployment in Microsoft Azure.
- Create and connect to SQL databases in Azure.

## **Module 7: Azure Active Directory**

This module describes how to manage Active Directory objects and how they can be used for identity and access management. The module also describes how to configure authentication by using multi-factor authentication and single sign-on.

### **Lessons**

- Manage Azure AD Objects
- Manage Authentication

### **Lab : Create Users in Azure Active Directory**

- Create an Azure AD Directory
- Create Users in Azure Active Directory

After completing this module, students will be able to:

- Manage Microsoft Azure Active Directory (Azure AD) objects.
- Manage authentication.

## **Module 8: Microsoft Azure Management Tools**

This module provides an overview of the tools that you can use to manage Microsoft Azure such as Azure PowerShell, Visual Studio, and Xplat CLI.

### **Lessons**

- Azure PowerShell
- The Azure SDK and the Azure Cross-Platform Command-Line Interface

### **Lab : Using Microsoft Azure Management Tools**

- Use the Azure PowerShell Modules
- Use the Azure Cross-Platform Command-Line Interface

After completing this module, students will be able to:

- Describe and use Windows Azure PowerShell to manage your Azure subscription.
  - Describe and use Microsoft Visual Studio and the Azure cross-platform command-line interface to manage your Azure subscription.
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