

16 HORAS

## INTRODUCTION

This course provides the underlying knowledge required by all individuals who will be evaluating Microsoft Azure, whether they are administrators, developers, or database administrators. This course also provides the prerequisite knowledge for students wishing to attend Course 20532D: Developing Microsoft Azure Solutions, or Course 20533D: Implementing Microsoft Azure Infrastructure Solutions. This course will introduce students to the principles of cloud computing. Students will become familiar with how these principles have been implemented in Microsoft Azure. In addition, this course will explain how to implement the core Azure infrastructure, consisting of virtual networks and storage. With this foundation, students will learn how to create the most common Azure services, including Azure Virtual Machines, Web Apps, and Azure SQL Database. The course will conclude by describing features of Azure AD and methods of integrating it with on-premises Active Directory.

## AUDIENCE

This course is intended for individuals who want to evaluate deploying, configuring, and administering services and virtual machines (VMs) by using Azure. This includes:

- Developers who want to evaluate creating Azure solutions.
- Windows Server administrators who want to evaluate the migration of on-premises Active Directory roles and services to the cloud.
- IT professionals who want to evaluate the use of Azure to host websites and mobile app back-end services.
- Database administrators who want to evaluate the use of Azure to host SQL databases.

## AT COURSE COMPLETION

After completing this course, students will be able to:

- Describe cloud computing, Azure, and Azure subscriptions.
- Use Azure PowerShell, the Azure Software Development Kit (SDK), and the Azure command-line interface (CLI) to manage Azure subscriptions.
- Create and configure virtual machines in Azure, and manage their disks.
- Create, configure, and monitor web apps in Azure and deploy Azure platform as a service (PaaS) cloud services.
- Create and configure Azure virtual networks.
- Create, manage, and configure cloud storage in Azure.
- Use Azure SQL Database to create, configure, and manage SQL databases.

- Create and manage Azure AD.

## PREREQUISITES

Before attending this course, students must have:

- Understanding of how to deploy websites
- A basic understanding of virtualization
- A basic understanding of Active Directory concepts, including domains, users, and domain controllers

## COURSE OUTLINE

### Module 1: Getting Started with Microsoft Azure

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

### Module 2: Microsoft Azure management tools

- What is Azure PowerShell
- Azure SDK and Azure CLI

### Module 3: Virtual machines in Microsoft Azure

- Creating and configuring VMs
- Configuring Azure VM storage

### Module 4: Azure Web Apps

- Creating and configuring Azure web apps
- Deploying and monitoring Azure web apps

### Module 5: Implementing Azure networking

- Getting started with Azure networks
- Getting started with Azure Load Balancers

### Module 6: Introduction Azure Storage and Data Services

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

### Module 7: Introduction to containers and serverless computing in Azure

- Implementing Windows and Linux containers in Azure
- Introduction to Azure serverless computing

### Module 8: Configuring and managing Azure AD

- Overview of Azure AD
- Manage Azure AD authentication and authorization