This course teaches IT Professionals how to create and manage virtual machines as part of an Infrastructure as a Service (IaaS) computing infrastructure. Students learn how to assess their on-premises environment for virtual machine readiness in preparation for moving resources to the cloud, including sizing, pricing, and design considerations.

Who Should Attend

This course is for Azure Administrators. Azure Administrators manage the cloud services that span storage, networking, and compute cloud capabilities, with a deep understanding of each service across the full IT lifecycle. They take end-user requests for new cloud applications and make recommendations on services to use for optimal performance and scale, as well as provision, size, monitor and adjust as appropriate. This role requires communicating and coordinating with vendors. Azure Administrators use the Azure Portal and as they become more proficient they use PowerShell and the Command Line Interface.

Course Objectives

Explain virtual machine usage cases, storage options, pricing, operating systems, networking capabilities, and general planning considerations.
Create Windows virtual machines in the Azure Portal, with Azure PowerShell, or using ARM Templates.
Deploy custom server images and Linux virtual machines.
Configure virtual machine networking and storage options.
Implement virtual machine high availability, scalability, and custom scripts extensions.
Backup, restore, and monitor virtual machines.

Course Outline

1 OVERVIEW OF AZURE MACHINES
Azure Virtual Machines Overview
Planning Considerations

2 CREATING VIRTUAL MACHINES
Overview of the Virtual Machine Creation Overview
Creating Virtual Machines in the Azure Portal
Creating Virtual Machines (PowerShell)
Creating Virtual Machines using ARM Templates

3 DEPLOYING VIRTUAL MACHINE IMAGES
Deploying Custom Images
Deploying Linux Virtual Machines

4 CONFIGURING VIRTUAL MACHINES
Overview of Virtual Machine Configuration
Virtual Machine Networking
Virtual Machine Storage

5 CONFIGURING AVAILABILITY AND EXTENSIBILITY
Virtual Machine Availability
Virtual Machine Scalability
Applying Virtual Machine Extensions
6 MANAGING AND MONITORING VIRTUAL MACHINES

Backup and Restore
Monitoring Virtual Machines