

Azure Fundamentals

Modality: On Demand

Duration: 16 Hours

About this course:

The objective of this course is to provide information about Microsoft Azure at a primal stage. It is designed for those people who want to understand the very basics of Microsoft Azure. It will extensively explain the services provided by Microsoft Azure, its functioning and how you can take advantage from it in terms of learning.

The course syllabus includes everything a beginner should know about Microsoft Azure. It will explain its purpose, the technology behind its structure for providing services, and the way it executes to provide a cloud platform with high scalability, high availability and is highly secure too.

Students will learn about virtual machines and their deployment such as Azure, Windows or Linux. They will gain knowledge of Azure networking and learn about building secure networks that can be connected in various circumstances. Students will also get to know various types of Storage Services provided by Azure and the methods used for building, managing and securing them. Students will learn about Azure Active Directory and how secure identity and access management solutions are provided through Azure Identity Services and their benefits for an organization.

Students will eventually understand about Azures' cloud computing model Platform-as-a-service (PaaS) and will learn deployment of web application in a faster and easier manner by using Azure App Service.

At an average, the salary of a person having Associate Microsoft Azure skills is **\$85,000** per year.

Course Objectives:

After successful completion of this course, students will be capable of:

- Defining cloud computing, Azure and its subscriptions.
- Using Azure Powershell and Azure Software Development Kit (SDK), managing Azure subscriptions using Azure Command Line Interface (CLI).
- Building, configuring and managing disks of Virtual Machines in Azure.
- Creating, configuring and monitoring web applications in Azure and deploying Azure Platform-as-a-service (PaaS) cloud service.
- Creating and configuring Azure Virtual Networks.
- Building, managing and configuring cloud storage services in Azure.
- Using Azure SQL Database to build, configure and manage databases of SQL.
- Creating and managing Azure Active Directory.

Audience:

The course intends to provide knowledge to persons willing to learn evaluation, deployment, configuration, administration of services and virtual machines (VMs) through Azure. This also includes:

- Developers who yearn for evaluation through creating Azure solutions.
- Administrators of Windows Servers who want to learn evaluation of on-premises Active Directory roles migration and services to the cloud.
- IT professionals willing to determine the usage of Azure in hosting websites and back-end services of mobile applications.
- Database administrators willing to learn the usage of Azure in hosting SQL databases.

Prerequisites:

- A basic knowledge of the notions used in Active Directory along with: Users, domain and domain controllers.
- A fundamental knowledge of websites and databases such as tables and simple queries used to manipulate with them.

Course Outline:

Module 1: Introduction to Azure

- Overview of Azure
- Azure Data Centers and Services
- Classic Azure Portal
- New Azure Portal
- Azure Subscriptions
- Introduction to Resource Manager
- Azure REST APIs and SDKs
- Azure PowerShell
- Azure CLI
- Review Questions:
- Practical Exercises

Module 2: Azure Virtual Machines

- IaaS and Virtual Machines
- Planning Virtual Machine Deployment
- Virtual Machines (Portal)
- Virtual Machines (Templates)
- Virtual Machines (Linux)
- Virtual Machine Availability
- Virtual Machine Scalability
- Review Questions
- Practical Exercises

Module 3: Azure Networking

- Overview of Virtual Networks
- Creating and Managing Virtual Networks
- Deploying Virtual Machines into a Virtual Network
- Multiple NICs in Virtual Machines
- Network Security Groups
- Intersite Connectivity
- ExpressRoute
- Review Questions:
- Practical Exercises

Module 4: Azure Storage

- Azure Storage
- Storage Access Tools
- Virtual Machine Disks
- Azure File Storage
- Blob Storage
- Managing Large Amounts of Blob Storage
- Securing Storage
- Review Questions
- Practical Exercises

Module 5: Azure Identity

- Plan and Implement Azure Active Directory Overview
- Managing Azure Active Directory
- Multi-Factor Authentication
- Hybrid Active Directory Solutions
- Hybrid Synchronization with Azure AD Connect
- Integrating SaaS Services
- Managing Partner and Consumer Identities
- Review Questions
- Practical Exercises

Module 6: Azure PaaS

- Overview of PaaS Services
- Azure App Services
- App Service Plans
- Managing Apps with Azure App Services
- App Deployment with Azure App Services
- Data Services and Azure SQL
- Review Questions
- Practical Exercises

Final Exam: Graded

- Final Exam?

