



# Azure Administrator, Deployment

AZ100T - Version: 1

 5 days Course

## Description:

This 5-days course is comprised of 5 separate 1- day courses. This course will help you prepare to the Microsoft AZ-100 exam. You can review the daily syllabuses in the links below

Day 1: Managing Subscriptions and Resources

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=az100t01&branchName=165>

Day 2: Implementing and Managing Storage

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=az100t02&branchName=165>

Day 3: Deploying and Managing Virtual Machines

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=az100t03&branchName=165>

Day 4: Configure and Manage Virtual Networks

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=az100t04&branchName=165>

Day 5: Manage Identities

<http://scc.sela.co.il/Syl/Syllabus/Info?courseCode=az100t05&branchName=165>

## Intended audience:

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

## Prerequisites:

Successful Azure Administrators start this role with experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.

## Objectives:

Manage Azure subscriptions and billing, and implement Azure policies.

Implement access management with Azure users, groups, and role-based access control.

Use Azure Monitor to configure Azure alerts and review the Azure Activity Log.

Query and analyze Log Analytics data.

Deploy resources with ARM templates and organize Azure resources.

Optimize your use of Azure tools like the Azure portal, Azure PowerShell, Cloud Shell and the Azure CLI.

Create Azure storage accounts for different data replication, pricing, and content scenarios.

Implement virtual machine storage, blob storage, Azure files, and structured storage.

Secure and manage storage with shared access keys, Azure backup, and Azure File Sync.

Store and access data using Azure Content Delivery Network, and the Import and Export service.

Monitor Azure storage with metrics and alerts, and the Activity Log.

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.

Understand virtual networking components, IP addressing, and network routing options.

Implement Azure DNS domains, zones, record types, and resolution methods.

Configure network security groups, service endpoints, logging, and network troubleshooting.

Implement site connectivity schemas including VNet-to-VNet connections and virtual network peering.

Implement Azure Active Directory, Self-Service Password Reset, Azure AD Identity Protection, and integrated SaaS applications.

Configure domains and tenants, users and groups, roles, and devices.

Implement and manage Azure Active Directory integration options and Azure AD Application Proxy.

## Topics:

### Day 1

- Module 01 - Managing Azure Subscriptions
  - Overview of Azure Subscriptions
  - Billing
  - Azure Policy
- Module 02 - Access Management for Cloud Resources
  - Azure Users and Groups
  - Role-based Access Control
- Module 03 - Monitoring and Diagnostics
  - Exploring Monitoring Capabilities in Azure
  - Azure Alerts
  - Azure Activity Log
- Module 04 - Log Analytics
  - Introduction to Log Analytics
  - Querying and Analyzing Log Analytics Data
- Module 05 - Azure Resource Manager
  - ARM templates
  - Resource Groups
- Module 06 - Azure Tips, Tricks, and Tools
  - Azure Portal
  - Azure Tools and Environment

### Day 2

- Overview of Azure Storage
  - Azure storage accounts
  - Data replication
  - Azure Storage Explorer
- Storage Services
  - Virtual machine storage
  - Blob storage
  - Azure files

- Structured storage
- Securing and Managing Storage
  - Shared access keys
  - Azure backup
  - Azure File Sync
- Storing and Accessing Data
  - Azure Content Delivery Network
  - Import and Export service
  - Data Box
- Monitoring Storage
  - Metrics and Alerts
  - Activity Log
- Lab-Implement and Manage Storage
  - Prepare the lab environment.
  - Implement and use Azure Blob storage.
  - Implement and use Azure File storage.

## Day 3

- Module 1 - Overview of Azure Machines
  - Azure Virtual Machines Overview
  - Planning Considerations
- Module 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
- Module 3 - Deploying Virtual Machine Images
  - Deploying Custom Images
  - Deploying Linux Virtual Machines
- Module 4 - Configuring Virtual Machines
  - Overview of Virtual Machine Configuration
  - Virtual Machine Networking
  - Virtual Machine Storage
- Module 5 - Configuring Availability and Extensibility
  - Virtual Machine Availability

- Virtual Machine Scalability
- Applying Virtual Machine Extensions
- Module 6 - Managing and Monitoring Virtual Machines
  - Backup and Restore
  - Monitoring Virtual Machines

## Day 4

- Module 1 - Azure Virtual Networks
  - Introducing Virtual Networks
  - Creating Azure Virtual Networks
  - Review of IP Addressing
  - Network Routing
- Module 2 - Azure DNS
  - Azure DNS Basics
  - Implementing Azure DNS
- Module 3 - Securing Virtual Network Resources
  - Introduction to Network Security Groups
  - Implementing Network Security Groups and Service Endpoints
- Module 4 - Connecting Virtual Networks
  - Intersite Connectivity (VNet-to-VNet Connections)
  - Virtual Network Peering

## Day 5

- Module 1 - Managing Azure Active Directory
  - Azure Active Directory Overview
  - Self-Service Password Reset
  - Azure AD Identity Protection
  - Integrating SaaS Applications with Azure AD
- Module 2 - Managing Azure Active Directory Objects
  - Azure Domains and Tenants
  - Azure Users and Groups
  - Azure Roles
  - Managing Devices
- Module 3 - Implementing and Managing Hybrid Identities

- ° Azure Active Directory Integration Options
- ° Azure AD Application Proxy