

Azure Security Certification Prep: Securing Data and Applications

This Azure data and application security training covers how to use the built-in Azure tools and resources to secure your data and lock down your applications in the Azure cloud. This course teaches you how to make data and applications available on an Azure cloud deployment without increasing the risk of a breach. Before you can expand your Azure footprint, automate your workflow, or deploy a CI/CD pipeline, you need to make sure your data and apps are secure.

[CBT Nuggets course material](#) →

WEEK 1

Configure Azure SQL Encryption and Data Protection **158 min.**

Introducing SQL Encryption Operations	1
Azure Virtual Machine Disk Encryption	15
Cell Level Encryption	13
Dynamic Data Masking	9
Transparent Data Encryption	8
AlwaysEncrypted Concepts	11

Configure Azure SQL Authentication

Overview	1
Introducing SQL Authentication	1
Explore the SQL Architecture	14
Create SQL Logins	14
Create SQL Users	15
Create Azure Active Directory Users	11

Secure Data in Azure Storage Accounts

Overview	1
Introducing Secure Azure Storage Accounts	1
RBAC	12
Shared Access Signatures	12
Shared Access Keys	6
BYOK	11

WEEK 2

157 min.

Data Protection Settings	12
Storage Account Backups	7

Secure Microsoft Azure Container Registry

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Compare Features Across Azure Container Registry SKUs	11
Secure Azure Container Registry With Customer-Managed Key	8
Import Images Into Azure Container Registry With PowerShell	8
Secure Azure Container Registry With Private Link	6
Test ACR Private Link Connectivity From Azure Linux VM	9
Apply Azure Policy Compliance Rules to Container Registry	10

Understand and Secure Azure Container Apps

Overview	1
Intro to Microsoft Azure Container Apps	11
Deploy Simple Azure Container App With NGINX	9
Create Azure Container App Revisions and Scale	9
Enable Traffic Splitting for Azure Container App Revisions	6
Build Custom Container Image for Azure Container Apps	9
Deploy Custom Container Image to Azure Container Apps	7
Securely Connect Azure Container Apps to Virtual Network	10

Overview of Securing Azure Kubernetes Service

Overview	1
Intro to Securing Azure Kubernetes Service	10

WEEK 3

156 min.

Learn About TLS Encryption Security for Azure AKS	7
Azure Container Image Registry vs. Public Registries	8
AKS Logging and Metrics & Policy Controls	8
What is Kubernetes Network Policy in AKS?	8
Deploy the AKS Secure Baseline Network Layer	12
Deploy Azure Container Registry and AKS Cluster	10

Securely Exposing Remote Access to Azure Networks

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Intro to Microsoft Azure Secure Remote Access	9
Create Microsoft Azure Bastion Basic SKU Environment	10
Connect to Windows and Linux VMs With Azure Bastion	8
Use Native RDP Client With Azure Bastion Standard	13
Tunnel Linux SSH Connections with Azure Bastion CLI	5
Temporary VM Access With Microsoft Defender Just-in-Time	11

Applied Security for Microsoft Azure API Management

Overview	1
Intro to Microsoft Azure API Management	10
Deploy Azure API Management Instance	10
Create API Definition With Mock Response	8
Test API Management Mock Endpoints	5
Secure Access to API Management Products with Subscription Keys	10

WEEK 4**153 min.**

Delegate Access to APIs With Workspaces and RBAC 8

Authentication for Microsoft Azure Kubernetes Service

Overview 1

Intro to Microsoft Azure Kubernetes Service Auth 8

Create AKS Cluster With Azure AD Integration 7

Connect Kubectl to AKS Cluster as Administrative User 9

Create Limited Access Azure AD Dev User and VM 9

Deploy Kubernetes Role and RoleBinding Resources 11

Test Kubernetes Access as Limited Dev User 8

Implement Networking for Azure Kubernetes Service

Overview 1

Intro to Networking for Azure Kubernetes 10

Understanding the Azure Container Network Interface (CNI) 7

Deploy AKS Clusters With Kubenet and Azure CNI 11

Explore Kubernetes Pods Running on Azure CNI 10

Expose Pods Running on Kubenet via NodePort Service 11

Configure Disk Encryption in Microsoft Azure

Overview 1

Intro to Storage Disks in Microsoft Azure 10

Default Disk Encryption for Azure Virtual Machines 10

Enable Customer Managed Key With Disk Encryption Set 11

Understanding Encryption at Host for Azure VMs 7

WEEK 5**70 min.**

Evaluate Azure Disk Encryption (ADE) for Block Storage 5

Implement Azure Disk Encryption on Linux VM 13

Hands-on With Azure API Management Policies

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Intro to Microsoft Azure API Management Policies 10

Using the Set Backend Policy for API Management 12

Rewrite URLs With Azure API Management Policy 10

Apply Rate Limit Policy on Azure API Management 9

Define Ruesable Policy Fragments in Azure API Management 8