The Challenge Labs Microsoft Azure Library gives you a 180-day subscription that includes access to over 150 Challenge Labs related to Microsoft Azure.

Challenge Labs are goal oriented, short-duration, scenario-based hands-on exercises, and an excellent way to provide additional skills development and assessment.

As new Challenge Labs are released, you will gain automatic access to them for the duration of your subscription.

Audience
- IT Professionals who are looking to keep up to date on features and functionality for a particular technology
- IT Professionals who are responsible for supporting multiple technologies

Challenge Labs Topics

Azure: Automation Services
AA-000	Getting Started with Azure Automation Services [Getting Started]
AA-001	Manage an Azure VM using Cloud Shell [Guided]
AA-002	Deploy an Azure VM using PowerShell [Guided]
AA-003	Can You Enable and Configure Just in Time VM Access in Security Center? [Advanced]
AA-004	Configure Monitoring of an Azure VM Using Log Analytics [Guided]
AA- 005	Configure the Hybrid Runbook Worker Solution [Guided]
AA -006	Can you execute a runbook against a Hybrid Runbook Worker? [Advanced]
AA-007	Monitor and Resolve Security Issues using Security Center [Guided]
AA-008	Change the Size of an Azure VM using PowerShell [Guided]
AA-009	Can you Enable Disk Encryption using BitLocker and Key Vault? [Advanced]
AA-010	Configure Update Management for On-Premises Systems by Using Azure Automation Accounts [Expert]

Azure: Architect Technologies Solutions
AATS-000	Getting Started with Azure Architecture Technology Solutions [Getting Started]
AATS-001	Configure Geo-Replication for Your Database [Guided]
AATS-002	Enable Dynamic Data Masking by using Azure SQL Database [Guided]
AATS-003	Can you enable Always Encrypted using SQL Server? [Advanced]
AATS-004	Use Azure Storage Explorer [Guided]
AATS-005	Enable VM Backup using Recovery Services Vault [Guided]
AATS-006	Can you use RBAC and Design a Custom Role? [Advanced]
AATS-007	Use Managed Identities [Guided]
AATS-008	Configure Continuous Deployment using GIT and Deployment Slots [Guided]
AATS-009	Can You Use Managed Identities? [Advanced]

AATS-010   Can You Configure an Autoscale Alert on a VM Scale Set? [Expert]

Azure: Infrastructure Solutions

AIS-000   Getting Started with Azure Infrastructure Solutions [Getting Started]
AIS-001   Create Linux Virtual Machines in an Availability Set [Guided]
AIS-002   Configure a Virtual Machine Scale Set [Guided]
AIS-003   Work with managed disk snapshots [Guided]
AIS-004   Can you Configure a Load-Balanced Virtual Machine Scale Set? [Advanced]
AIS-005   Configure near real-time metric alerts [Guided]
AIS-006   Configure a Virtual Machine by Using a Custom Script Extension [Guided]
AIS-007   Configure a Virtual Machine by Using a PowerShell DSC extension [Guided]
AIS-008   Deploy an ARM Template That Contains a PowerShell DSC Extension [Guided]
AIS-009   Can you Automate and Monitor VMs Using Extensions and Azure Monitor? [Advanced]
AIS-010   Can You Automate and Manage Custom, Scalable Azure VM–Based Infrastructure Solutions? [Expert]

Azure: Network Security Solutions

ANS-000   Getting Started with Azure Network Security [Getting Started]
ANS-001   Configure a Network Security Group in a Virtual Network [Guided]
ANS-002   Configure Route Tables in a Virtual Network [Guided]
ANS-003   Configure Global VNet Peering [Guided]
ANS-004   Can you Implement a Secure Azure Virtual Machine Network? [Advanced]
ANS-005   Configure a Virtual Network Service Endpoint [Guided]
ANS-006   Implement Security for an Azure Web App [Guided]
ANS-007   Can You Implement Security for an Azure Web App? [Advanced]
ANS-008   Create an API Management Instance [Guided]
ANS-009   Can You Configure an API Management Solution? [Advanced]
ANS-010   Can You Deliver Secure Services to your Organization? [Expert]
ANS-011   Log Virtual Machine Network Traffic by Using Network Watcher? [Expert]
ANS-012   Monitor Communication Between Virtual Machines by Using Network Watcher [Guided]

Azure: Platform Protection

APP-001   Configure Authentication for an Azure Web App [Guided]
APP-002   Configure Virtual Network Connectivity by Using Peering [Guided]
APP-003   Configure Virtual Network Connectivity by Using Peering? [Guided]
APP-004   Can you Configure Network Security to Allow Application Traffic? [Advanced]
APP-005   Configure Azure Disk Encryption [Guided]
APP-006   Can You Harden Virtual Machines in Azure? [Advanced]
APP-007   Configure Security by Using the Azure Kubernetes Service (AKS) [Guided]
APP-008   Create Azure Resource Locks on a Web App [Guided]
APP-009   Can You Configure Multi-Scope Network Security? [Advanced]

APP-010   Can You Configure Multi-Scope Resource Permissions? [Expert]

Azure: Architect Storage, VMs, and Monitoring

AZ300.1-000   Getting Started with Azure Storage, Virtual Machines, and Monitoring [Getting Started]
AZ300.1-001   Implement and Manage Azure Storage [Guided]
AZ300.1-002   Manage Access to Azure Storage [Guided]
AZ300.1-003   Monitor Azure Storage [Guided]
AZ300.1-004   Can You Implement, Manage, and Monitor Azure Storage? [Advanced]
AZ300.1-005   Automate Deployment of Azure Virtual Machines by Using Azure Resource Manager Templates [Guided]
AZ300.1-006   Deploy an Azure Virtual Machines by Using Azure PowerShell [Guided]
AZ300.1-007   Deploy an Azure Virtual Machines by Using Azure CLI 2.0 [Guided]
AZ300.1-008   Can You Automate Deployment of Virtual Machines? [Advanced]
AZ300.1-009   Configure Diagnostics Settings on Azure Virtual Machine [Guided]
AZ300.1-010   Collect Log Data from Windows Computers [Guided]
AZ300.1-011   Collect Log Data from Linux Computers [Guided]
AZ300.1-012   Create an Azure Virtual Machine Alert [Guided]
AZ300.1-013   Can You Monitor an Azure Virtual Machine? [Advanced]
AZ300.1-014   Can You Create, Manage, and Monitor Azure Virtual Machines? [Expert]

Azure: Networking and High Availability

AZ300.2-000   Getting Started with Networking and High Availability [Getting Started]
AZ300.2-001   Implement Azure Virtual Networking [Guided]
AZ300.2-002   Implement Azure Virtual Network Routing [Guided]
AZ300.2-003   Implement Network Security Groups and Application Security Groups [Guided]
AZ300.2-004   Can You Configure Azure Virtual Networking? [Advanced]
AZ300.2-005   Configure an Azure VNet-to-VNet Connection [Guided]
AZ300.2-006   Configure Azure Virtual Network Peering [Guided]
AZ300.2-007   Implement an Azure Load Balancer [Guided]
AZ300.2-008   Can You Configure and Control Network Traffic? [Advanced]
AZ300.2-009   Implement Azure Backup for Azure Virtual Machines [Guided]
AZ300.2-010   Migrate an Azure Virtual Machine by Using a Recovery Services Vault [Guided]
AZ300.2-011   Create an Azure Virtual Machine Snapshot [Guided]
AZ300.2-012   Can You Implement Azure Data Protection? [Advanced]
AZ300.2-013   Can You Manage Azure Network Connectivity and High Availability? [Expert]

AZ300.3-000   Getting Started with Azure Active Directory [Getting Started]
AZ300.3-001   Install and Configure Azure AD Connect [Guided]
AZ300.3-002   Implement Self-Service Password Reset [Guided]
AZ300.3-003   Can You Manage an Azure Active Directory Hybrid Environment? [Advanced]
AZ300.3-004   Implement Azure Policy [Guided]

AZ300.3-005   Implement Role-Based Access Control [Guided]
AZ300.3-006   Create Role-Based Access Control Custom Roles [Guided]
AZ300.3-007   Implement Managed Identities for Azure Virtual Machines [Guided]
AZ300.3-008   Can You Configure Governance Over Azure Active Directory Security Principals? [Advanced]
AZ300.3-009   Implement Multi-Factor Authentication for an Azure Active Directory User [Guided]
AZ300.3-010   Implement an Azure Conditional Access Policy [Guided]
AZ300.3-011   Can You Control Azure Active Directory Authentication and Access? [Advanced]
AZ300.3-012   Can You Implement and Govern an Azure AD Environment? [Expert]

Azure: Fundamentals
AZ900-001   Manage Azure Resource Deployment by Using an Azure Resource Manager Template [Guided]
AZ900-002   Manage Azure Resource Groups [Guided]
AZ900-003   Run Commands by Using Azure Cloud Shell [Guided]
AZ900-004   Create an Azure Function App [Guided]
AZ900-005   Create an Azure Logic App [Guided]
AZ900-006   Configure an Azure Distributed Denial of Service Protection Plan [Guided]
AZ900-007   Manage Encryption by Using an Azure Key Vault [Guided]
AZ900-008   Configure Azure Role-Based Access Control [Guided]
AZ900-009   Configure an Azure Lock [Guided]
AZ900-010   Configure Monitoring by Using Azure Monitor [Guided]
AZ900-011   Deploy an Azure Virtual Machine [Guided]
AZ900-012   View Azure Service Health Options [Guided]
AZ900-013   Manage Azure Active Directory Users and Groups [Guided]
AZ900-014   Implement a Network Security Group [Guided]
AZ900-015   Azure Cost Management [Guided]

Azure: Architect Design Solutions
CSAA-001   Provision a Function App [Guided]
CSAA-002   Provision a Logic App [Guided]
CSAA-003   Can you manage a serverless compute environment? [Advanced]
CSAA-004a   Provision an Azure Container Instance [Guided]
CSAA-004r   Provision an Azure Container Registry [Guided]
CSAA-005   Provision a Container-based Web App [Guided]
CSAA-006   Can you Provision a Serverless Container-based Environment? [Advanced]
CSAA-007   Provision an Azure Storage Table [Guided]
CSAA-008   Provision an Azure Storage Queue [Guided]
CSAA-009   Can You manage PaaS Storage Services to Support an Application? [Advanced]

Azure: IoT Solutions
CSIOT-000   Getting Started with Azure IoT Solutions [Getting Started]
CSIOT-001   Ingest IoT Data with the Azure IoT Hub [Guided]

CSIOT-002   Manage IoT Devices with the Azure IoT Hub [Guided]
CSIOT-003   Can you Manage IoT Devices with the Azure IoT Hub? [Advanced]
CSIOT-004   Process IoT Data with Azure Stream Analytics [Guided]
CSIOT-005   Implement IoT Hub Endpoints and Consumer Groups [Guided]
CSIOT-006   Can you Process Incoming IoT Data in Real Time? [Advanced]
CSIOT-007   Store IoT data with Cosmos DB [Guided]
CSIOT-008   Use Azure Time Series Insights to Analyze IoT Data [Guided]
CSIOT-009   Can you Store and Analyze IoT Data? [Advanced]
CSIOT-010   Can you Provision an End-to-End IoT Solution? [Expert]

Azure: Manage, Monitor, and Secure
CSMMS-000   Getting Started with Azure Web App Management and Monitoring [Getting Started]
CSMMS-001   Provision Web Apps [Guided]
CSMMS-002   Deploy a Web Job [Guided]
CSMMS-003   Autoscale a Web App [Guided]
CSMMS-004   Can you Manage a Web App? [Advanced]
CSMMS-005   Configure Application Insights [Guided]
CSMMS-006   Set an Azure Alert for a Web App [Guided]
CSMMS-007   Can you Monitor a Web App? [Advanced]
CSMMS-008   Secure a Storage Account [Guided]
CSMMS-009   Secure Azure SQL Server [Guided]
CSMMS-010   Store Sensitive Data in Azure Key Vault [Guided]
CSMMS-011   Can you secure Azure platform services? [Advanced]
CSMMS-012   Can you manage, monitor, and secure Azure platform services? [Expert]

Azure: Storage Solutions for Developers
CSSD-001   Access a Public Storage Container from an ASP.NET Web App [Guided]
CSSD-002   Integrate Blob Storage with Private Access [Guided]
CSSD-003   Can You Integrate Blob Storage into a Web App? [Advanced]
CSSD-004   Integrate a SQL Server Database [Guided]
CSSD-005   Integrate a MySQL Database [Guided]
CSSD-006   Can You Integrate Relational Data into a Web App? [Advanced]
CSSD-007   Integrate a Cosmos DB SQL API Database [Guided]
CSSD-008   Integrate a Cosmos DB Database by Using the Table API [Guided]
CSSD-010   Can You Integrate storage? [Expert]

Azure: Storage Solutions
CSST-000   Getting Started with Azure Storage [Getting Started]
CSST-001   Configure Blob Storage with Public Access [Guided]
CSST-002   Configure Blob Storage with Private Access [Guided]
CSST-003   Can you Provision Public and Private Blob Storage for a Web App? [Advanced]

CSST-004   Provision an Azure SQL Server database [Guided]
CSST-005   Provision an Azure Database for MySQL database [Guided]
CSST-006   Can you Provision Relational Databases for a Web App? [Advanced]
CSST-007   Provision an Azure Cosmos DB [Guided]
CSST-008   Provision an Azure Cognitive Search Service [Guided]
CSST-009   Can you Provision NoSQL data for a Web App? [Advanced]
CSST-010   Can you Provision Data Storage for a Web App? [Expert]

Azure: Data Solution Design

DADS-000   Getting Started with Designing an Azure Data Solution [Getting Started]
DADS-001   Design an Cosmos DB Account for High Availability [Guided]
DADS-002   Design an Azure SQL Database Design for Disaster Recovery [Guided]
DADS-003   Design an Azure Synapse Analytics SQL Pool [Guided]
DADS004   Can You Design an Azure Synapse Analytics? [Advanced]
DADS-005   Design an Azure Stream Analytics Solution [Guided]
DADS-006   Design a Mapping Data Flow by Using Azure Data Factory [Guided]
DADS-007   Design a Data Security Solution by Using a Private Endpoint [Guided]
DADS-008   Can You Populate an Azure SQL Database by Using Azure Data Factory? [Advanced]
DADS-009   Design an Access Policies for a Storage Account [Guided]
DADS-010   Design Role Based Access Control (RBAC) for Data Lake Storage [Guided]
DADS-011   Design an Always Encrypted Solution by Using Azure SQL Database [Guided]
DADS-012   Can You Design an Encryption Strategy by Using Azure SQL Database? [Advanced]
DADS-013   Can You Design a Data Movement Solution by Using Azure Data Factory? [Expert]

Azure: Hybrid Cloud ARM Solutions

HCARM-000   Getting Started with Hybrid Cloud ARM [Getting Started]
HCARM-001   Design Azure App Service Web Apps [Guided]
HCARM-002   Develop an Azure App Service Mobile Apps [Guided]
HCARM-003   Can You Develop an Azure Mobile App That Uses an Azure SQL Database? [Advanced]
HCARM-004   Deploy Workloads on an Azure Virtual Machine [Guided]
HCARM-005   Monitor an Azure Virtual Machine [Guided]
HCARM-006   Can you Design and Implement a Storage Solution on an Azure Virtual Machine? [Advanced]
HCARM-007   Deploy an Applications by Using Azure Kubernetes Service [Guided]
HCARM-008   Develop an Azure Logic App Using Messaging Services [Guided]
HCARM-009   Can you create a serverless API by using Azure Functions? [Advanced]
HCARM-010   Can you Deploy Hybrid-Cloud Azure Solutions by using ARM templates? [Expert]

Azure: Hybrid Cloud Services

HCS-000   Getting Started with Hybrid Cloud Solutions [Getting Started]
HCS-001   Deploy an Azure Web App by Using Deployment Slots [Guided]
HCS-002   Configure Web App Load Balancing [Guided]

HCS-003	Can you Deploy an Azure Web App using Azure SQL Database? [Advanced]
HCS-004	Provision an Azure VM with SQL Server [Guided]
HCS-005	Enable High Availability using Availability Sets [Guided]
HCS-006	Configure Virtual Networks [Guided]
HCS-007	Can you Deploy Azure Virtual Machines for multi-tier apps? [Advanced]
HCS-008	Deploy resources by Using an Azure Resource Manager Template [Guided]
HCS-009	Enable Azure Virtual Machine Scale Sets for High Availability and Scalability [Guided]
HCS-010	Can you deploy scalable Azure solutions using ARM templates? [Advanced]
HCS-011	Can You Deploy a Web App with Database Authentication using Azure AD? [Expert]

Azure: Data Solution Implementation

IADS-000	Getting Started with Implementing an Azure Data Solution [Getting Started]
IADS-001	Provision an Azure Cosmos DB Account [Guided]
IADS-002	Enable Geo-Replication of an Azure SQL Database [Guided]
IADS-003	Implement Dynamic Data Masking by Using Azure SQL Database [Guided]
IADS-004	Can You Implement an Azure SQL Database by Using Secure Distribution? [Advanced]
IADS-005	Enable Azure Data Lake Storage [Guided]
IADS-006	Stream Events by Using Azure Event Hubs [Guided]
IADS-007	Provision Azure Data Factory [Guided]
IADS-008	Can You Implement Data Movement by Using Azure Data Factory? [Advanced]
IADS-009	Enable Azure SQL Database Auditing [Guided]
IADS-010	Configure Azure Monitor Alerts [Guided]
IADS-011	Deploy Azure Synapse Analytics [Guided]
IADS-012	Can you optimize and monitor Azure Synapse Analytics? [Advanced]
IADS-013	Can you populate Azure Synapse Analytics using Azure Data Factory? [Expert]

Azure: Secure Data & Applications

SDA-000	Getting Started with Azure Secure Data and Applications [Getting Started]
SDA-001	Configure Application Insights and App Service Logs for a Web App [Guided]
SDA-002	Configure Security Recommendations for an Azure Virtual Machine [Guided]
SDA-003	Can You Enable Secure Virtual Machines and Application Services? [Advanced]
SDA-004	Enable database Auditing for an Azure SQL Database [Guided]
SDA-005	Enable Azure Defender for SQL in an Azure SQL Database [Guided]
SDA-006	Can You Enable Security for an Azure SQL Database? [Advanced]
SDA-007	Manage Shared Access Signature Keys [Guided]
SDA-008	Configure Security for an Azure Cosmos DB Account and a Storage Account? [Guided]
SDA-009	Can You Implement Security for an Azure Cosmos DB Account and a Storage Account? [Advanced]
SDA-010	Can You Manage Security for Virtual Machines and Databases? [Expert]