Microsoft Azure training and certifications

aka.ms/AzureTrainCertDeck
This guide has been created to provide training and certification options to achieve personal success.

## Training journeys
- Training journey for cloud IT pros
- Training journey for hybrid cloud IT pros
- Training journey for cloud IT pros expert level
- Training journey for developers
- Training journey for data & AI professionals
- Training journey for data analysts

## Microsoft Virtual Training Days
- Microsoft Azure Virtual Training Days

## Microsoft Azure certifications
- Certifications poster
- Certifications overview
- Azure Fundamentals
- Azure Data Fundamentals
- Azure AI Fundamentals
- Azure Administrator Associate
- Azure Security Engineer Associate
- Azure Stack Hub Operator Associate
- Azure Network Engineer Associate
- Azure Support Engineer for Connectivity Specialty
- Windows Server Hybrid Administrator Associate
- Azure Solutions Architect Expert
- Azure for SAP Workloads Specialty
- Azure Virtual Desktop Specialty
- Azure Developer Associate
- DevOps Engineer Expert
- Azure IoT Developer Specialty
- Azure Database Administrator Associate
- Azure Data Engineer Associate
- Azure Enterprise Data Analyst Associate
- Azure Cosmos DB Developer Specialty
- Azure AI Engineer Associate
- Azure Data Scientist Associate
Training journey for cloud IT pros

Grow in role

Start here

Implement, manage, and monitor cloud solutions
Azure administrator - AZ-104

Choose additional paths that best fit your role and projects

Implement and manage secure cloud solutions
Azure security engineer - AZ-500

Manage SAP solutions on Azure
Azure for SAP workloads - AZ-120

Bring cloud agility on-premises
Azure Stack Hub operator - AZ-600
Delivered only by Microsoft Learning Partners

Implement and manage networking solutions
Azure network engineer - AZ-700

Deliver virtual desktop experiences and remote apps on Azure
Azure Virtual Desktop administrator - AZ-140

Master the basics

New to the cloud or new to Azure
Azure fundamentals - AZ-900

New to Azure administration
Prerequisites for Azure administrators

Want to keep learning?
Explore the Security, Compliance, and Identity Training Journey

Check out the full Azure Training Journey
Training journey for hybrid cloud IT pros

Grow in role

Start here

- Manage Windows Server on-premises, hybrid, and IaaS platform workloads
  - Windows Server hybrid administrator
    - AZ-800
    - AZ-801

Choose additional paths that best fit your role and projects

- Implement, manage, and monitor cloud solutions
  - Azure administrator
    - AZ-104

- Deliver virtual desktop experiences and remote apps on Azure
  - Azure Virtual Desktop administrator
    - AZ-140

Master the basics

New to the cloud or new to Azure

- Azure fundamentals
  - AZ-900

New to Azure administration

- Prerequisites for Azure administrators
Training journey for cloud IT pros expert level

Grow in role

Start here

Implement, manage, and monitor cloud solutions
Azure administrator

Choose additional paths that best fit your role and projects

Deliver continuous value integrating people, processes, and technologies
DevOps engineer

Design and implement end-to-end cloud solutions
Azure solutions architect

Master the basics

New to Azure administration
Prerequisites for Azure administrators

New to Azure infrastructure architecture
Prerequisites for Azure solution architects
Training journey for developers

Grow in role

Start here

- Design, build, test, and maintain cloud apps
  - Azure developer
  - AZ-204

Choose additional paths that best fit your role and projects

- Build, manage, and deploy AI solutions
  - Azure AI engineer
  - AI-102

- Deliver continuous value integrating people, processes, and technologies
  - DevOps engineer
  - AZ-400

- Develop cloud and edge IoT solutions
  - Azure IoT developer
  - AZ-220

- Develop cloud-native apps that store and manage data
  - Azure Cosmos DB developer
  - DP-420

Master the basics

New to the cloud or new to Azure
- Azure fundamentals
  - AZ-900

New to data solutions on Azure
- Azure data fundamentals
  - DP-900

New to AI or new to AI on Azure
- Azure AI fundamentals
  - AI-900

Want to keep learning? Check out the Power Platform Training Journey

Check out the full Azure Training Journey
Training journey for data & AI professionals

Start here

Manage relational cloud and hybrid databases
Azure database administrator

Choose additional paths that best fit your role and projects

Deliver continuous value integrating people, processes, and technologies
Azure data engineer

Build, train, and deploy machine learning models
Azure data scientist

Master the basics

New to the cloud or new to Azure
Azure fundamentals

New to data solutions on Azure
Azure data fundamentals

New to AI or new to AI on Azure
Azure AI fundamentals

Check out the full Azure Training Journey
Training journey for data analysts

Grow in role

Start here

Maximize the value of data assets with advanced analytics
Power BI data analyst

Build enterprise-scale data analytics solutions
Azure Enterprise data analyst

Master the basics

New to the cloud or new to Azure
Azure fundamentals

New to data solutions on Azure
Azure data fundamentals

New to Microsoft Power Platform
Microsoft Power Platform Fundamentals

Check out the full Azure Training Journey
Microsoft **Azure** Virtual Training Days

Grow your skills in just days

Take advantage of free, in-depth, virtual training events, and start boosting your career potential right away. Grow your technical skills through weekly events for every skill level.

<table>
<thead>
<tr>
<th>Azure AI Fundamentals</th>
<th>Deliver Integrated Analytics with Azure Synapse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azure Data Fundamentals</td>
<td>DevOps with GitHub</td>
</tr>
<tr>
<td>Azure Fundamentals</td>
<td>Linux OSS Database Migration</td>
</tr>
<tr>
<td>Azure Virtual Desktop</td>
<td>Migrating On-Premises Infrastructure and Data</td>
</tr>
<tr>
<td>Cloud-Native Apps</td>
<td>Well-Architected</td>
</tr>
</tbody>
</table>

View all Azure Virtual Training Days
Microsoft Azure certifications

Help advance your career, earn recognition, and validate your technical knowledge and abilities in current and future industry job roles with Microsoft Azure certifications. Visit the certifications page to get started.

Manage hybrid cloud infrastructure

Support with data and analytics

Innovate with best-in-class apps

Secure from the ground up

Azure Administrator Associate
Azure Security Engineer Associate
Azure Network Engineer Associate
Azure Stack Hub Operator Associate
Windows Server Hybrid Administrator Associate
Azure Virtual Desktop Specialty
Azure for SAP Workloads Specialty
Azure Support Engineer for Connectivity Specialty
Azure Data Scientist Associate
Azure Data Engineer Associate
Azure Database Administrator Associate
Azure Enterprise Data Analyst Associate
Azure Solutions Architect Expert
DevOps Engineer Expert
Azure Developer Associate
Azure IoT Developer Specialty
Azure Fundamentals
Azure Data Fundamentals
Azure AI Fundamentals
Azure AI Engineer Associate
Azure Cosmos DB Developer Specialty

Azure. Invent with purpose.
# Microsoft Azure certifications for IT pros

<table>
<thead>
<tr>
<th>Certification</th>
<th>Exam Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Azure Administrator Associate</strong></td>
<td>AZ-104</td>
<td>Azure administrators implement, manage, and monitor an organization’s Microsoft Azure environment.</td>
</tr>
<tr>
<td><strong>Azure Security Engineer Associate</strong></td>
<td>AZ-500</td>
<td>Azure security engineers implement security controls that protect identity, access, data, applications, and networks in cloud and hybrid environments as part of an end-to-end infrastructure.</td>
</tr>
<tr>
<td><strong>Azure Stack Hub Operator Associate</strong></td>
<td>AZ-600</td>
<td>Azure Stack Hub operators provide infrastructure as a service (IaaS) and platform as a service (PaaS) offering to end users or customers from within their own datacenter using Azure Stack Hub.</td>
</tr>
<tr>
<td><strong>Azure Network Engineer Associate</strong></td>
<td>AZ-700</td>
<td>Azure network engineers plan, implement, and maintain Azure networking solutions, including hybrid networking, connectivity, routing, security, and private access to Azure services.</td>
</tr>
<tr>
<td><strong>Windows Server Hybrid Administrator Associate</strong></td>
<td>AZ-800 + AZ-801</td>
<td>Windows Server hybrid administrators configure and manage Windows Server on-premises, hybrid, and infrastructure as a service (IaaS) platform workloads.</td>
</tr>
</tbody>
</table>

**Azure administrators**
- Manage Azure identities and governance
- Implement and manage storage
- Deploy and manage Azure compute resources
- Configure and manage virtual networking
- Monitor and maintain Azure resources

**Azure security engineers**
- Manage identity and access
- Implement platform protection
- Manage security operations
- Secure data and applications

**Azure Stack Hub operators**
- Plan and deploy Azure Stack Hub
- Provide services
- Manage infrastructure

**Azure network engineers**
- Design, implement, and manage hybrid networking
- Design and implement core networking infrastructure
- Design and implement routing
- Secure and monitor networks
- Design and implement private access to Azure services

**Windows Server hybrid administrators**
- Deploy and manage Active Directory Domain Services (AD DS) in on-premises and cloud environments
- Manage Windows Servers and workloads in a hybrid environment
- Manage virtual machines and containers
- Implement and manage an on-premises and hybrid networking infrastructure
- Manage storage and file services
- Secure Windows Server on-premises and hybrid infrastructures
- Implement and manage Windows Server high availability
- Implement disaster recovery
- Migrate servers and workloads
- Monitor and troubleshoot Windows Server environments
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam AZ-400</td>
<td>Exam AZ-305</td>
<td>Exam AZ-120</td>
<td>Exam AZ-140</td>
<td>Exam AZ-720</td>
</tr>
</tbody>
</table>

DevOps engineers work with people, processes, and products to enable continuous delivery of value in organizations.

Azure solution architects design cloud and hybrid solutions that run on Microsoft Azure, including compute, network, storage, monitoring, and security.

Architects or engineers for Azure for SAP Workloads have extensive experience and knowledge of the SAP system landscape and industry standards that are specific to the initial migration or integration and the long-term operation of an SAP solution on Microsoft Azure.

Administrators for Azure Virtual Desktop design, implement, manage, and maintain Microsoft Azure Virtual Desktop experiences and remote apps for any device.

Support engineers for Azure connectivity use advanced troubleshooting methods to resolve networking and connectivity issues in Azure.

- Develop an instrumentation strategy
- Develop a Site Reliability Engineering (SRE) strategy
- Develop a security and compliance plan
- Manage source control
- Facilitate communication and collaboration
- Define and implement continuous integration
- Define and implement a continuous delivery and release management strategy

- Design identity, governance, and monitoring solutions
- Design data storage solutions
- Design business continuity solutions
- Design infrastructure solutions

- Migrate SAP workloads to Azure
- Design and implement an infrastructure to support SAP workloads on Azure
- Design and implement high availability and disaster recovery (HA/DR)
- Maintain SAP workloads on Azure

- Plan and implement an Azure Virtual Desktop infrastructure
- Plan and implement user environments and apps
- Monitor and maintain an Azure Virtual Desktop infrastructure

- Troubleshoot business continuity issues
- Troubleshoot hybrid and cloud connectivity issues
- Troubleshoot Platform as a Service issues
- Troubleshoot authentication and access control issues
- Troubleshoot networks
- Troubleshoot VM connectivity issues
<table>
<thead>
<tr>
<th>Microsoft Azure certifications for developers</th>
<th>Innovate with best-in-class apps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Azure Developer Associate</strong>&lt;br&gt;Exam AZ-204</td>
<td><strong>Azure Cosmos DB Developer Specialty</strong>&lt;br&gt;Exam DP-420</td>
</tr>
<tr>
<td>Azure developers participate in all phases of development from requirements definition and design to development, deployment, and maintenance.</td>
<td>Azure Cosmos DB developers design, implement, and monitor cloud-native applications that store and manage data.</td>
</tr>
<tr>
<td><strong>DevOps Engineer Expert</strong>&lt;br&gt;Exam AZ-400</td>
<td><strong>Azure IoT Developer Specialty</strong>&lt;br&gt;Exam AZ-220</td>
</tr>
<tr>
<td>DevOps engineers work with people, processes, and products to enable continuous delivery of value in organizations.</td>
<td>Azure IoT developers implement the configuration and coding tasks required to create and maintain the cloud and edge portions of an IoT solution.</td>
</tr>
<tr>
<td><strong>Azure AI Engineer Associate</strong>&lt;br&gt;Exam AI-102</td>
<td><strong>Azure AI Engineer Associate</strong>&lt;br&gt;Exam AI-102</td>
</tr>
<tr>
<td>Azure AI engineers build, manage, and deploy AI solutions that leverage Azure Cognitive Services and Azure Applied AI services.</td>
<td>Azure AI engineers build, manage, and deploy AI solutions that leverage Azure Cognitive Services and Azure Applied AI services.</td>
</tr>
<tr>
<td><strong>Azure Cosmos DB Developer Specialty</strong>&lt;br&gt;Exam DP-420</td>
<td></td>
</tr>
<tr>
<td>Azure Cosmos DB developers design, implement, and monitor cloud-native applications that store and manage data.</td>
<td></td>
</tr>
</tbody>
</table>

- Develop Azure compute solutions
- Develop for Azure storage
- Implement Azure security
- Monitor, troubleshoot, and optimize Azure solutions
- Connect to and consume Azure services and third-party services

<table>
<thead>
<tr>
<th>Azure Developer Associate</th>
<th>DevOps Engineer Expert</th>
<th>Azure IoT Developer Specialty</th>
<th>Azure AI Engineer Associate</th>
<th>Azure Cosmos DB Developer Specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exam AZ-204</strong></td>
<td><strong>Exam AZ-400</strong></td>
<td><strong>Exam AZ-220</strong></td>
<td><strong>Exam AI-102</strong></td>
<td><strong>Exam DP-420</strong></td>
</tr>
</tbody>
</table>

- Set up the Azure IoT Hub solution infrastructure
- Provision and manage devices
- Implement IoT Edge
- Implement business integration
- Process and manage data
- Monitor, troubleshoot, and optimize IoT solutions
- Implement security

- Plan and manage an Azure Cognitive Services solution
- Implement Computer Vision solutions
- Implement natural language processing solutions
- Implement knowledge mining solutions
- Implement conversational AI solutions

- Design and implement data models
- Design and implement data distribution
- Integrate an Azure Cosmos DB solution
- Optimize an Azure Cosmos DB solution
- Maintain an Azure Cosmos DB solution
## Microsoft Azure certifications for data and AI pros (1)

### Support with data and analytics

<table>
<thead>
<tr>
<th>Azure Database Administrator Associate</th>
<th>Azure Data Engineer Associate</th>
<th>Azure Data Scientist Associate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exam DP-300</strong></td>
<td><strong>Exam DP-203</strong></td>
<td><strong>Exam DP-100</strong></td>
</tr>
<tr>
<td>Azure database administrators implement and manage the operational aspects of cloud-native and hybrid data platform solutions built with Microsoft SQL Server and Microsoft Azure Data Services.</td>
<td>Azure data engineers integrate, transform, and consolidate data from various structured and unstructured data systems into structures that are suitable for building analytics solutions.</td>
<td>Azure data scientists apply data science and machine learning to implement and run machine learning workloads on Azure.</td>
</tr>
</tbody>
</table>

- Plan and implement data platform resources
- Implement a secure environment
- Monitor, configure, and optimize database resources
- Configure and manage automation of tasks
- Plan and configure a high availability and disaster recovery (HA/DR) environment

- Design and implement data storage
- Design and develop data processing
- Design and implement data security
- Monitor and optimize data storage and data processing

- Manage Azure resources for machine learning
- Run experiments and train models
- Deploy and operationalize machine learning solutions
- Implement responsible machine learning
<table>
<thead>
<tr>
<th>Azure AI Engineer Associate</th>
<th>Azure Cosmos DB Developer Specialty</th>
<th>Azure Enterprise Data Analyst Associate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exam AI-102</strong></td>
<td><strong>Exam DP-420</strong></td>
<td><strong>Exam DP-500</strong></td>
</tr>
<tr>
<td>Azure AI engineers build, manage, and deploy AI solutions that leverage Azure Cognitive Services and Azure Applied AI services.</td>
<td>Azure Cosmos DB developers design, implement, and monitor cloud-native applications that store and manage data.</td>
<td>Azure Enterprise data analysts design, create, and deploy enterprise-scale data analytics solutions.</td>
</tr>
</tbody>
</table>

- Plan and manage an Azure Cognitive Services solution
- Implement Computer Vision solutions
- Implement natural language processing solutions
- Implement knowledge mining solutions
- Implement conversational AI solutions
- Design and implement data models
- Design and implement data distribution
- Integrate an Azure Cosmos DB solution
- Optimize an Azure Cosmos DB solution
- Maintain an Azure Cosmos DB solution
- Implement and manage a data analytics environment
- Query and transform data
- Implement and manage data models
- Explore and visualize data
Get the right foundations

<table>
<thead>
<tr>
<th>Azure Fundamentals</th>
<th>Azure AI Fundamentals</th>
<th>Azure Data Fundamentals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam AZ-900</td>
<td>Exam AI-900</td>
<td>Exam DP-900</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Azure fundamentals validates foundational knowledge of cloud services and how those services are provided with Microsoft Azure.</td>
<td>Azure AI fundamentals validates foundational knowledge of machine learning and artificial intelligence concepts and related Microsoft Azure services.</td>
<td>Azure data fundamentals validates foundational knowledge of core data concepts and how they’re implemented using Azure data services.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Describe cloud concepts</td>
<td>• Describe AI workloads and considerations</td>
<td>• Describe core data concepts</td>
</tr>
<tr>
<td>• Describe Azure architecture and services</td>
<td>• Describe fundamental principles of machine learning on Azure</td>
<td>• Identify considerations for relational data on Azure</td>
</tr>
<tr>
<td>• Describe Azure management and governance</td>
<td>• Describe features of computer vision workloads on Azure</td>
<td>• Describe considerations for working with non-relational data on Azure</td>
</tr>
<tr>
<td></td>
<td>• Describe features of Natural Language Processing (NLP) workloads on Azure</td>
<td>• Describe an analytics workload on Azure</td>
</tr>
</tbody>
</table>
The journey to Microsoft Certified: Azure Fundamentals

Start here
Decide if this is the right certification for you

Get trained

This certification is a good fit if:
• You are new to the cloud or new to Azure.

Exam study guide
› AZ-900

Self-paced training
› Microsoft Learn

Instructor-led training
› Course AZ-900: Microsoft Azure Fundamentals

Virtual events
› Microsoft Azure Virtual Training Day: Fundamentals

Build confidence

Exam preparation
› Exam Readiness Zone

Take a practice exam
› Practice Assessment on Microsoft Learn AZ-900

Skills measured:
• Describe cloud concepts
• Describe Azure architecture and services
• Describe Azure management and governance

Get recognized

Pass Exam AZ-900 to earn this certification.

Microsoft Certified: Azure Fundamentals
Azure fundamentals validates foundational knowledge of cloud services and how those services are provided with Microsoft Azure.

Products featured
• Microsoft Azure

Watch the Azure certifications overview video
Start here

Decide if this is the right certification for you

This certification is a good fit if:

• You are beginning to work with data in the cloud.

Get trained

Exam study guide

› DP-900

Self-paced training

› Microsoft Learn

Instructor-led training

› Course DP-900: Microsoft Azure Data Fundamentals

Virtual events

› Microsoft Azure Virtual Training Day: Data Fundamentals

Build confidence

Exam preparation

› Exam Readiness Zone

Take a practice exam

› Practice Assessment on Microsoft Learn DP-900

Skills measured:

• Describe core data concepts
• Identify considerations for relational data on Azure
• Describe considerations for working with non-relational data on Azure
• Describe an analytics workload on Azure

Get recognized

Pass Exam DP-900 to earn this certification.

Microsoft Certified: Azure Data Fundamentals

Azure data fundamentals validates foundational knowledge of core data concepts and how they’re implemented using Azure data services.

Brand new? First, master the basics.

New to the cloud or Azure?

Choose Azure fundamentals training.

Products featured

• Microsoft Azure
• Microsoft SQL Server
## The journey to Microsoft Certified: Azure AI Fundamentals

### Get started

Get started at [aka.ms/AzureCerts_AIFundamentals](aka.ms/AzureCerts_AIFundamentals)

### Start here

Decide if this is the right certification for you

### Get trained

This certification is a good fit if:
- You are new to AI or AI on Azure.

- **Exam study guide**
  - AI-900

- **Self-paced training**
  - Microsoft Learn

- **Instructor-led training**
  - Course AI-900: Microsoft Azure AI Fundamentals

- **Virtual events**
  - Microsoft Azure Virtual Training Day: AI Fundamentals

### Build confidence

- **Exam preparation**
  - Exam Readiness Zone

- **Take a practice exam**
  - Practice Assessment on Microsoft Learn AI-900

### Get recognized

- **Skills measured:**
  - Describe AI workloads and considerations
  - Describe fundamental principles of machine learning on Azure
  - Describe features of computer vision workloads on Azure
  - Describe features of Natural Language Processing (NLP) workloads on Azure

- **Pass** Exam AI-900 to earn this certification.

**Microsoft Certified: Azure AI Fundamentals**

Azure AI fundamentals validates foundational knowledge of machine learning and artificial intelligence concepts and related Microsoft Azure services.

### Products featured

- Microsoft Azure

---

Brand new? First, master the basics.

New to the cloud or Azure? Choose Azure fundamentals training.

Watch the Azure certifications overview video
The journey to Microsoft Certified: Azure Administrator Associate

Get started at aka.ms/AzureCerts_Admin

Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:

• Managing, and monitoring identity, governance, storage, compute, and virtual networks in a cloud environment, plus provision, size, monitor, and adjust resources, when needed.

OR

If you already have or were working toward any of these certifications:

• MCSE: Core Infrastructure
• MCSA: Windows Server 2012
• MCSA: Windows Server 2016

Brand new? First, master the basics.

New to the cloud or Azure? Choose Azure fundamentals training.

New to administering Azure? Choose prerequisites for Azure administrators training.

Get trained

Exam study guide
AZ-104

Self-paced training
Microsoft Learn

Instructor-led training
Course AZ-104: Microsoft Azure Administrator

Build confidence

Exam preparation
Exam Readiness Zone

Take a practice exam
Microsoft Official Practice Test AZ-104

Skills measured:

• Manage Azure identities and governance
• Implement and manage storage
• Deploy and manage Azure compute resources
• Configure and manage virtual networking
• Monitor and maintain Azure resources

Get recognized

Pass Exam AZ-104 to earn this certification.

Microsoft Certified: Azure Administrator Associate
Azure administrators implement, manage, and monitor an organization’s Microsoft Azure environment.

Products featured

• Microsoft Azure

Watch the Azure certifications overview video
The journey to Microsoft Certified: Azure Security Engineer Associate

Get started at aka.ms/AzureCerts_SecurityEngineer

This certification is a good fit if your responsibilities include:

- Managing the security posture, identifying and remediating vulnerabilities, performing threat modeling, implementing threat protection, and responding to security incident escalations.

Start here

Decide if this is the right certification for you

Get trained

Exam study guide
- AZ-500

Self-paced training
- Microsoft Learn

Instructor-led training
- Course AZ-500: Microsoft Azure Security Technologies

Build confidence

Exam preparation
- Exam Readiness Zone

Take a practice exam
- Microsoft Official Practice Test AZ-500

Skills measured:
- Manage identity and access
- Implement platform protection
- Manage security operations
- Secure data and applications

Get recognized

- Pass Exam AZ-500 to earn this certification.

Microsoft Certified: Azure Security Engineer Associate

Azure security engineers implement security controls that protect identity, access, data, applications, and networks in cloud and hybrid environments as part of an end-to-end infrastructure.

First, make sure your skills are up to date.

Need to update your skills in Azure administration?
Choose Azure administrator training.

Products featured

- Microsoft Azure

Watch the Azure certifications overview video
The journey to Microsoft Certified: Azure Stack Hub Operator Associate

Get started at aka.ms/AzureCerts_StackHubOperator

Start here

Decide if this is the right certification for you

Get trained

Exam study guide
AZ-600

Self-paced training
Microsoft Learn

Instructor-led training
Course AZ-600: Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack Hub

Build confidence

Exam preparation
Exam Readiness Zone

Take a practice exam
Microsoft Official Practice Test AZ-600

Skills measured:
- Plan and deploy Azure Stack Hub
- Provide services
- Manage infrastructure

Get recognized

Pass Exam AZ-600 to earn this certification.

Microsoft Certified: Azure Stack Hub Operator Associate

Azure Stack Hub operators provide infrastructure as a service (IaaS) and platform as a service (PaaS) offering to end users or customers from within their own datacenter using Azure Stack Hub.

First, make sure your skills are up to date.

Need to update your skills in Azure administration?
Choose Azure administrator training.

Products featured:
- Microsoft Azure

Watch the Azure certifications overview video
The journey to Microsoft Certified: Azure Network Engineer Associate

Start here
Decide if this is the right certification for you

Get trained

- Exam study guide
  - AZ-700

- Self-paced training
  - Microsoft Learn

- Instructor-led training
  - Course AZ-700: Designing and Implementing Microsoft Azure Networking Solutions

Build confidence

- Exam preparation
  - Exam Readiness Zone

- Take a practice exam
  - Microsoft Official Practice Test AZ-700

- Skills measured:
  - Design, implement, and manage hybrid networking
  - Design and implement core networking infrastructure
  - Design and implement routing
  - Secure and monitor networks
  - Design and implement private access to Azure services

Get recognized

- Pass Exam AZ-700 to earn this certification.

- Microsoft Certified: Azure Network Engineer Associate
  - Azure network engineers plan, implement, and maintain Azure networking solutions, including hybrid networking, connectivity, routing, security, and private access to Azure services.

First, make sure your skills are up to date.

Need to update your skills in Azure administration?
Choose Azure administrator training.
The journey to Microsoft Certified: Azure Support Engineer for Connectivity Specialty

Get started at aka.ms/AzureCerts_SupportEngConnectivity

Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:

- Troubleshooting hybrid environments, including issues with Azure Virtual Machines, virtual networks, and connectivity between on-premises and Azure services.
- Using various tools and technologies to diagnose and identify root causes for complex issues.

Get trained

- Exam study guide
  - AZ-720
- Self-paced training
  - Microsoft Learn
- Instructor-led training
  - Coming soon

Build confidence

- Exam preparation
  - Exam Readiness Zone
- Skills measured:
  - Troubleshoot business continuity issues
  - Troubleshoot hybrid and cloud connectivity issues
  - Troubleshoot Platform as a Service issues
  - Troubleshoot authentication and access control issues
  - Troubleshoot networks
  - Troubleshoot VM connectivity issues

Get recognized

- Pass Exam AZ-720 to earn this certification.

Microsoft Certified: Azure Support Engineer for Connectivity Specialty
Support engineers for Azure connectivity use advanced troubleshooting methods to resolve networking and connectivity issues in Azure.

First, make sure your skills are up to date.

Need to update your skills in Azure administration?
Choose Azure administrator training.

Need to update your skills in Azure networking?
Choose Azure network engineer training.

Products featured

- Microsoft Azure

Watch the Azure certifications overview video
The journey to Microsoft Certified: Windows Server Hybrid Administrator Associate

**Start here**
Decide if this is the right certification for you

**Get trained**

- **Exam study guides**
  - [AZ-800](#) and [AZ-801](#)

- **Self-paced training**
  - [Microsoft Learn](#)

- **Instructor-led training**
  - [Course AZ-800 Administering Windows Server Hybrid Core Infrastructure](#)
  - [Course AZ-801T00 Configuring Windows Server Hybrid Advanced Services](#)

- **Virtual events**
  - [Microsoft Azure Virtual Training Day: Implementing Hybrid Infrastructure](#)

**Build confidence**

- **Skills measured:**
  - Deploy and manage Active Directory Domain Services (AD DS) in on-premises and cloud environments
  - Manage Windows Servers and workloads in a hybrid environment
  - Manage virtual machines and containers
  - Implement and manage an on-premises and hybrid networking infrastructure
  - Manage storage and file services
  - Secure Windows Server on-premises and hybrid infrastructures
  - Implement and manage Windows Server high availability
  - Implement disaster recovery
  - Migrate servers and workloads
  - Monitor and troubleshoot Windows Server environments

**Exams**

- [Exam AZ-800](#) and [Exam AZ-801](#)

**Get recognized**

- Pass [Exam AZ-800](#) and [Exam AZ-801](#) to earn this certification.

**Exam preparation**

- [Exam Readiness Zone](#)

- [Take a practice exam](#)
  - [Microsoft Official Practice Test AZ-801](#)

**Products featured**

- Windows Server
- Microsoft Azure

---

Get started at [aka.ms/AzureCerts_WindowsServer](#)

**OR**

If you already have or were working toward any of these certifications:

- MCSE: Core Infrastructure
- MCSA: Windows Server 2012
- MCSA: Windows Server 2016

**Virtual events**

- [Microsoft Azure Virtual Training Day: Implementing Hybrid Infrastructure](#)

---

**Build confidence**

- **Skills measured:**
  - Deploy and manage Active Directory Domain Services (AD DS) in on-premises and cloud environments
  - Manage Windows Servers and workloads in a hybrid environment
  - Manage virtual machines and containers
  - Implement and manage an on-premises and hybrid networking infrastructure
  - Manage storage and file services
  - Secure Windows Server on-premises and hybrid infrastructures
  - Implement and manage Windows Server high availability
  - Implement disaster recovery
  - Migrate servers and workloads
  - Monitor and troubleshoot Windows Server environments

---

Microsoft Certified: Windows Server Hybrid Administrator Associate

Windows Server hybrid administrators configure and manage Windows Server on-premises, hybrid, and infrastructure as a service (IaaS) platform workloads.

**Watch the Azure certifications overview video**
The journey to Microsoft Certified: Azure Solutions Architect Expert

Get started at aka.ms/AzureCerts_SolutionsArchitect

Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:
• Advising stakeholders and translating business requirements into designs for secure, scalable, and reliable Azure solutions.

Prerequisite: Certification
• Azure Administrator Associate

Get trained

Exam study guide
AZ-305

Self-paced training
Microsoft Learn

Instructor-led training
Course AZ-305: Designing Microsoft Azure Infrastructure Solutions

Virtual events
Microsoft Azure Virtual Training Day: Well-Architected

Build confidence

Exam preparation
Exam Readiness Zone

Take a practice exam
Practice Assessment on Microsoft Learn AZ-305

Skills measured:
• Design identity, governance, and monitoring solutions
• Design data storage solutions
• Design business continuity solutions
• Design infrastructure solutions

Get recognized

Pass Exam AZ-305 to earn this certification.

Microsoft Certified: Azure Solutions Architect Expert
Azure solution architects design cloud and hybrid solutions that run on Microsoft Azure, including compute, network, storage, monitoring, and security.

First, make sure your skills are up to date.

Need to update your skills in Azure infrastructure architecture?
Choose Azure architect design prerequisites training.

Products featured
• Microsoft Azure

Watch the Azure certifications overview video
The journey to Microsoft Certified:
Azure for SAP Workloads Specialty

Get started at aka.ms/AzureCerts_SAPWorkloads

### Start here

Decide if this is the right certification for you

### Get trained

- **Exam study guide**
  - AZ-120
- **Self-paced training**
  - Microsoft Learn
- **Instructor-led training**
  - Course AZ-120: Planning and Administering Microsoft Azure for SAP Workloads

### Build confidence

- **Exam preparation**
  - Exam Readiness Zone
- **Take a practice exam**
  - Microsoft Official Practice Test AZ-120

### Get recognized

- **Skills measured:**
  - Migrate SAP workloads to Azure
  - Design and implement an infrastructure to support SAP workloads on Azure
  - Design and implement high availability and disaster recovery (HA/DR)
  - Maintain SAP workloads on Azure

- **Pass Exam AZ-120 to earn this certification.**

---

Microsoft Certified: Azure for SAP Workloads Specialty

Architects or engineers for Azure for SAP Workloads have extensive experience and knowledge of the SAP system landscape and industry standards that are specific to the initial migration or integration and the long-term operation of an SAP solution on Microsoft Azure.

### Products featured

- Microsoft Azure

---

First, make sure your skills are up to date.

Need to update your skills in Azure administration?
Choose Azure administrator training.

Need to update your skills in Azure architecture?
Choose Azure solutions architect training.

Watch the Azure certifications overview video
This certification is a good fit if your responsibilities include:

- Deploying virtual desktop experiences and apps to Azure.
- Delivering applications on Azure Virtual Desktop and optimizing them to run in multi-session virtual environments.

First, make sure your skills are up to date.

**Exam study guide**
- AZ-140

**Self-paced training**
- Microsoft Learn

**Instructor-led training**
- Course AZ-140: Configuring and Operating Microsoft Azure Virtual Desktop

**Virtual events**
- Microsoft Azure Virtual Training Day: Azure Virtual Desktop

**Skills measured:**
- Plan and implement an Azure Virtual Desktop infrastructure
- Plan and implement identity and security
- Plan and implement user environments and apps
- Monitor and maintain an Azure Virtual Desktop infrastructure

**Pass Exam AZ-140 to earn this certification.**

Microsoft Certified: Azure Virtual Desktop Specialty

Administrators for Azure Virtual Desktop design, implement, manage, and maintain Microsoft Azure Virtual Desktop experiences and remote apps for any device.

**Products featured**
- Microsoft Azure
The journey to Microsoft Certified: Azure Developer Associate

Get started at aka.ms/AzureCerts_Developer

Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:

• Participating in all phases of cloud development: requirements definition and design, development, deployment, maintenance, performance tuning, and monitoring

OR

If you already have or are working toward any of these certifications:

• MCSD: App Builder
• MCSA: Web Applications
• MCSA: Universal Windows Platform

Brand new? First, master the basics.

New to the cloud or Azure?
Choose Azure fundamentals training.

Get trained

Exam study guide
› AZ-204

Self-paced training
› Microsoft Learn

Instructor-led training
› Course AZ-204: Developing solutions for Microsoft Azure

Build confidence

Exam preparation
› Exam Readiness Zone

Take a practice exam
› Practice Assessment on Microsoft Learn AZ-204

Skills measured:
• Develop Azure compute solutions
• Develop for Azure storage
• Implement Azure security
• Monitor, troubleshoot, and optimize Azure solutions
• Connect to and consume Azure services and third-party services

Get recognized

› Pass Exam AZ-204 to earn this certification.

Microsoft Certified: Azure Developer Associate

Azure developers participate in all phases of development from requirements definition and design to development, deployment, and maintenance.

Products featured

• Microsoft Azure

Watch the Azure certifications overview video
The journey to Microsoft Certified: DevOps Engineer Expert

Get started at aka.ms/AzureCerts_DevOpsEngineer

Start here
Decide if this is the right certification for you

Prerequisite

Certification option 1
• Azure Administrator Associate

OR

Certification option 2
• Azure Developer Associate

Exam study guide
AZ-400

Self-paced training
Microsoft Learn

Instructor-led training
Course AZ-400: Designing and Implementing Microsoft DevOps solutions

Virtual events
Microsoft Azure Virtual Training Day: DevOps with GitHub

Exam preparation
Exam Readiness Zone

Take a practice exam
Microsoft Official Practice Test AZ-400

Skills measured:
• Develop an instrumentation strategy
• Develop a Site Reliability Engineering (SRE) strategy
• Develop a security and compliance plan
• Manage source control
• Facilitate communication and collaboration
• Define and implement continuous integration
• Define and implement a continuous delivery and release management strategy

Pass Exam AZ-400 to earn this certification.

Microsoft Certified: DevOps Engineer Expert
DevOps engineers work with people, processes, and products to enable continuous delivery of value in organizations.

Microsoft Azure

Watch the Azure certifications overview video

Products featured
• Microsoft Azure
The journey to Microsoft Certified: Azure IoT Developer Specialty

Get started at aka.ms/AzureCerts_IoTDev

Start here
Decide if this is the right certification for you

Get trained

This certification is a good fit if your responsibilities include:

• Deploying, configuring, and maintaining physical devices using cloud services.
• Implementing design specifications for IoT solutions, including device topology, connectivity, diagnostics and monitoring, and security.
• Configuring device networking for the Azure IoT Edge portion of the solution.
• Implementing designs for solutions to manage data pipelines, including monitoring and data transformation as they relate to IoT.

Exam study guide
AZ-220

Self-paced training
Microsoft Learn

Instructor-led training
Course AZ-220: Microsoft Azure IoT Developer

Build confidence

Exam preparation
Exam Readiness Zone

Take a practice exam
Microsoft Official Practice Test AZ-220

Skills measured:
• Set up the Azure IoT Hub solution infrastructure
• Provision and manage devices
• Implement IoT Edge
• Implement business integration
• Process and manage data
• Monitor, troubleshoot, and optimize IoT solutions
• Implement security

Get recognized

Pass Exam AZ-220 to earn this certification.

Microsoft Certified: Azure IoT Developer Specialty

Azure IoT developers implement the configuration and coding tasks required to create and maintain the cloud and edge portions of an IoT solution.

Need to update your skills in Azure development?
Choose Azure developer training.

First, make sure your skills are up to date.

Watch the Azure certifications overview video

Products featured

• Microsoft Azure
The journey to Microsoft Certified: Azure Database Administrator Associate

Get started at aka.ms/AzureCerts_DatabaseAdmin

Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:

• Management, availability, security, and performance monitoring and optimization of database solutions.
• Evaluating and implementing migration strategies for moving databases to Azure.

OR

If you already have or are working toward any of these certifications:
• MCSA: SQL Server 2012/2014
• MCSA: SQL 2016 Database Development
• MCSA: SQL 2016 Database Administration

Get trained

Exam study guide
» DP-300

Self-paced training
» Microsoft Learn

Instructor-led training
» Course DP-300: Administering Microsoft Azure SQL Solutions

Virtual events
» Microsoft Azure Virtual Training Day: Migrating On-Premises Infrastructure and Data

Build confidence

Exam preparation
» Exam Readiness Zone

Take a practice exam
» Microsoft Official Practice Test DP-300

Skills measured:
• Plan and implement data platform resources
• Implement a secure environment
• Monitor, configure, and optimize database resources
• Configure and manage automation of tasks
• Plan and configure a high availability and disaster recovery (HA/DR) environment

Get recognized

» Pass Exam DP-300 to earn this certification.

Microsoft Certified: Azure Database Administrator Associate

Azure database administrators implement and manage the operational aspects of cloud-native and hybrid data platform solutions built with Microsoft SQL Server and Microsoft Azure Data Services.

Brand new? First, master the basics.

New to data solutions on Azure? Choose Azure data fundamentals training.

Products featured

• Microsoft Azure
• Microsoft SQL Server

Watch the Azure certifications overview video
The journey to Microsoft Certified: Azure Data Engineer Associate

Get started at aka.ms/AzureCerts_DataEngineer

Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:

- Building and maintaining secure and compliant data processing pipelines by using different tools and techniques.
- Using various Azure data services and languages to store and produce cleansed and enhanced datasets for analysis.

OR

If you already have or were working toward this certification:
- MCSA: Data Engineering with Azure

Brand new? First, master the basics.

New to data solutions on Azure?
Choose Azure data fundamentals training.

Get trained

Exam study guide
- DP-203

Self-paced training
- Microsoft Learn

Instructor-led training
- Course DP-203: Data Engineering on Microsoft Azure

Virtual events
- Microsoft Azure Virtual Training Day: Deliver Integrated Analytics with Azure Synapse

Build confidence

Exam preparation
- Exam Readiness Zone

Take a practice exam
- Practice Assessment on Microsoft Learn DP-203

Skills measured:
- Design and implement data storage
- Design and develop data processing
- Design and implement data security
- Monitor and optimize data storage and data processing

Get recognized

Pass Exam DP-203 to earn this certification.

Apply skills

Cloud Games on Microsoft Learn: Data Feeds

Microsoft Certified: Azure Data Engineer Associate

Azure data engineers integrate, transform, and consolidate data from various structured and unstructured data systems into structures that are suitable for building analytics solutions.

Products featured
- Microsoft Azure

Watch the Azure certifications overview video
The journey to Microsoft Certified: Azure Enterprise Data Analyst Associate

Get started at aka.ms/AzureCerts_EnterpriseDataAnalyst

Start here
Decide if this is the right certification for you

Get trained
Exam study guide
- DP-500
Self-paced training
- Microsoft Learn
Instructor-led training
- Course DP-500: Designing and Implementing Enterprise-Scale Analytics Solutions Using Microsoft Azure and Microsoft Power BI

Build confidence
Exam preparation
- Exam Readiness Zone

Skills measured:
- Implement and manage a data analytics environment
- Query and transform data
- Implement and manage data models
- Explore and visualize data

Get recognized
Pass Exam DP-500 to earn this certification.

Apply skills
Cloud Games on Microsoft Learn: Data Feeds

This certification is a good fit if your responsibilities include:

- Performing advanced data analytics at scale, such as cleaning and transforming data, designing and building enterprise data models, incorporating advanced analytics capabilities, integrating with IT infrastructure, and applying development lifecycle practices.
- Helping collect enterprise-level requirements for data analytics solutions that include Azure and Microsoft Power BI.
- Advising on data governance and configuration settings for Power BI administration, monitor data usage, and optimize performance of the data analytics solutions.

Brand new? First, master the basics.

New to data solutions on Azure? Choose Azure data fundamentals training.

Make sure your skills are up to date.

Need to update your skills in data analytics? Choose Microsoft Power BI data analyst training.

Products featured
- Microsoft Power BI

Microsoft Certified: Azure Enterprise Data Analyst Associate

Azure Enterprise data analysts design, create, and deploy enterprise-scale data analytics solutions.

Watch the Azure certifications overview video
The journey to Microsoft Certified: Azure Cosmos DB Developer Specialty

Get started at aka.ms/AzureCerts_CosmosDBDeveloper

Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:

- Designing and implementing data models and data distribution, loading data into an Azure Cosmos DB database, and optimizing and maintaining the solution.
- Designing, implementing, and monitoring solutions that consider security, availability, resilience, and performance requirements.

Get trained

Exam study guide
- DP-420

Self-paced training
- Microsoft Learn

Instructor-led training
- Course DP-420: Designing and Implementing Cloud-Native Applications Using Microsoft Azure Cosmos DB

Virtual events
- Microsoft Azure Virtual Training Day: Cloud-Native Apps

Build confidence

Exam preparation
- Exam Readiness Zone

Take a practice exam
- Microsoft Official Practice Test DP-420

Skills measured:
- Design and implement data models
- Design and implement data distribution
- Integrate an Azure Cosmos DB solution
- Optimize an Azure Cosmos DB solution
- Maintain an Azure Cosmos DB solution

Get recognized

Pass Exam DP-420 to earn this certification.

Microsoft Certified: Azure Cosmos DB Developer Specialty

Azure Cosmos DB developers design, implement, and monitor cloud-native applications that store and manage data.

Brand new? First, master the basics.

New to data solutions on Azure?
Choose Azure data fundamentals training.

Microsoft Azure

Watch the Azure certifications overview video
Start here
Decide if this is the right certification for you

This certification is a good fit if your responsibilities include:
• Participating in all phases of AI solutions development—from requirements definition and design to development, deployment, maintenance, performance tuning, and monitoring.

Get trained

Exam study guide
AI-102

Self-paced training
Microsoft Learn

Instructor-led training
Course AI-102: Designing and Implementing a Microsoft Azure AI Solution (4 days)

Build confidence

Exam preparation
Exam Readiness Zone

Take a practice exam
Microsoft Official Practice Test AI-102

Skills measured:
• Plan and manage an Azure Cognitive Services solution
• Implement Computer Vision solutions
• Implement natural language processing solutions
• Implement knowledge mining solutions
• Implement conversational AI solutions

Get recognized

Pass Exam AI-102 to earn this certification.

Microsoft Certified: Azure AI Engineer Associate
Azure AI engineers build, manage, and deploy AI solutions that leverage Azure Cognitive Services and Azure Applied AI services.

Products featured
• Microsoft Azure

Brand new? First, master the basics.

New to AI or AI on Azure?
Choose Azure AI fundamentals training.
The journey to Microsoft Certified: Azure Data Scientist Associate

Get started at aka.ms/AzureCerts_DataScientist

Start here
Decide if this is the right certification for you

Get trained

Exam study guide
› DP-100

Self-paced training
› Microsoft Learn

Instructor-led training
› Course DP-100: Designing and Implementing a Data
› Course DP-090: Implementing a Machine Learning Solution with Microsoft Azure Databricks

Build confidence

Exam preparation
› Exam Readiness Zone

Take a practice exam
› Microsoft Official Practice Test DP-100

Skills measured:
• Manage Azure resources for machine learning
• Run experiments and train models
• Deploy and operationalize machine learning solutions
• Implement responsible machine learning

Get recognized

› Pass Exam DP-100 to earn this certification.

Apply skills

› Cloud Games on Microsoft Learn: Data Feeds

Brand new? First, master the basics.

New to AI or AI on Azure?
Choose Azure AI fundamentals training.

Products featured
• Microsoft Azure

This certification is a good fit if your responsibilities include:

• Planning and creating a suitable working environment for data science workloads on Azure.
• Running data experiments and training predictive models.
• Managing, optimizing, and deploying machine learning models into production.

Microsoft Certified: Azure Data Scientist Associate
Azurè data scientists apply data science and machine learning to implement and run machine learning workloads on Azure.

Watch the Azure certifications overview video
Microsoft Learn
Spark possibility